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## On the taxonomy and zoogeography of some Palaearctic Paederinae and Xantholinini (Coleoptera: Staphylinidae)

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**Abstract:** Types and non-type material of Palaearctic Paederinae and Xantholinini are examined. Seven species are described: *Pseudomedon afghanicus* nov.sp. (Afghanistan), *Pseudomedon kazakhstanicus* nov.sp. (Kazakhstan), *Lithocharis schuelkei* nov.sp. (Yemen), *Lobrathium reuteri* nov.sp. (Iraq), *Lathrobium vitalyi* nov.sp. (Kazakhstan), *Xantholinus (Typhlolinus) minos* nov.sp. (Greece: Crete), *Xantholinus (Helicophallus) kurdistanicus* nov.sp. (Iraq). The new species, as well as various other species are illustrated. *Platydomene distinctiventris* (KOCH 1939), previously a subspecies of *P. sodale* (KRAATZ), is considered a distinct species, whose distribution is apparently confined to the Carpathians. The following synonymies are established: *Astenus* DEJEAN 1833 = *Astenognathus* REITTER 1909, nov.syn.; *Lathrobium* GRAVENHORST 1802 = *Centrocnemis* JOSEPH 1868, nov.syn., = *Centrocnemiella* STRAND 1934, nov.syn.; *Xantholinus* DEJEAN 1821 = *Meneidophallus* BORDONI 1999, nov.syn.; *Astenus gracilis* (PAYKULL 1789) = *A. rutilipennis* REITTER 1909, nov.syn.; *A. procerus* (GRAVENHORST 1806) = *A. noheli* COIFFAIT 1969, nov.syn.; *A. uniformis* (JACQUELIN DU VAL 1853) = *A. maghrebinus* COIFFAIT 1960, nov.syn.; *A. pallidulus* (WOLLASTON 1864) = *A. parviceps* RAGUSA 1891, nov.syn., = *A. antoinei* COIFFAIT 1980, nov.syn., = *A. murres* BORDONI 1994, nov.syn.; *Platystethus arenarius* (GEOFFROY 1785) = *Paederus verbasci* SCHRANK 1798, nov.syn.; *Rugilus orbiculatus* (PAYKULL 1796) = *R. exiguus* HEER 1839, nov.syn.; *R. rufipes* (GERMAR 1836) = *Stilicus nematideus* GISTEL 1857, nov.syn.; *Rugilus subtilis* (ERICHSON 1840) = *R. salicetorum* GISTEL 1857, nov.syn.; *Pseudomedon huetheri* (HUBENTHAL 1927) = *Medon huetheri helveticus* KOCH 1938, nov.syn.; *Pseudomedon obscurellus* (ERICHSON 1840) = *Scymbalium minimum* EPPELSHEIM 1888, nov.syn., = *Medon apfelbecki* BERNHAUER 1899, nov.syn.; *Lobrathium multipunctum* (GRAVENHORST 1802) = *Lathrobium multistriatum* MOTSCHULSKY 1858, nov.syn., = *Lathrobium differens* GEMMINGER & HAROLD 1868, nov.syn.; *Lathrobium longulum* GRAVENHORST 1802 = *L. scybalarium* GISTEL 1857, nov.syn., = *L. longulum luzari* KOCH 1937, nov.syn.; *L. laevipenne* HEER 1839 = *L. elytrale* GISTEL 1857, nov.syn.; *L. pallidum* NORDMANN 1837 = *L. krniense* JOSEPH 1868, nov.syn.; *L. brunripes* (FABRICIUS 1793) = *L. fuscum* GRAVENHORST 1806, nov.syn.; *Ochtheophilum fraticorne* (PAYKULL 1800) = *Cryptobium pallidum* GISTEL 1857, nov.syn.; *Zeteotomus brevicornis* (ERICHSON 1839) = *Metoponcus brevicornis cephallicus* BORDONI 1983, nov.syn.; *Gauropterus fulgidus* (FABRICIUS 1787) = *G. fulgidus pseudosanguinipes* COIFFAIT 1964, nov.syn.; *Xantholinus longiventris* HEER 1839 = *X. humidicola* GISTEL 1857, nov.syn., = *X. gastraeus* GISTEL 1857, nov.syn.; *X. varnensis* COIFFAIT 1972 = *X. gridellii carius* COIFFAIT 1972, nov.syn., = *X. graecus calcidicus* BORDONI 1973, nov.syn.; *X. ciliciae* BORDONI 1971 = *X. cypriacus* BORDONI 2007, nov.syn.; *Othius brevipennis* (KRAATZ 1857), nomen protectum = *Xantholinus rufus* GRIMMER 1841, nov.syn., nomen oblitum, = *X. occultans* GISTEL 1857, nov.syn.; *Lordithon lunulatus*

(LINNAEUS 1760) = *Staphylinus austriacus* SCHRANK 1781, nov.syn.; *Cordalia obscura* (GRAVENHORST 1802) = *Paederus clavicornis* LENTZ 1856, nov.syn. *Gyrophypnus libanoticus* BORDONI 1984 is again placed in the synonymy of *G. fracticornis* (MÜLLER 1776). Five previously synonymised names are revalidated: *Tetartoepus ciceronii* ZANETTI 1998, *Xantholinus varnensis* COIFFAIT 1972, *Gyrophypnus liber* ASSING 2003, *G. vomer* ASSING 2003, and *G. schuelkei* ASSING 2003. Neotypes are designated for *Sunius uniformis* JACQUELIN DU VAL 1853, *Lathrobium fuscum* GRAVENHORST 1806, *Xantholinus rufus* GRIMMER 1841, and *Xantholinus occultans* GISTEL 1857. Lectotypes are designated for *Astenus rutilipennis* REITTER 1909, *Sunius unicolor* MULSANT & REY 1878, *S. subditus* MULSANT & REY 1878, *S. bimaculatus* ERICHSON 1840, *Stilicus geniculatus* ERICHSON 1839, *S. similis* ERICHSON 1839, *S. subtilis* ERICHSON 1840, *Medon huetheri* HUBENTHAL 1927, *Medon huetheri helveticus* KOCH 1938, *Paederus ochraceus* GRAVENHORST 1802, *Lithocharis vilis* KRAATZ 1859, *L. nigriceps* KRAATZ 1859, *Lathrobium sodale distinctiventre* KOCH 1939, *L. spadiceum* ERICHSON 1840, and *Xantholinus graecus* KRAATZ 1858. Zoogeographic data are presented for various species, including numerous new country records; *Lithocharis subochracea* COIFFAIT 1966 is recorded from the Palaearctic region for the first time. The distributions of *Pseudomedon dido* (SAULCY 1865) and of the species of the *Xantholinus graecus* group are illustrated.

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## 1. Introduction

The taxonomic part of the work "Die Käfer Mitteleuropas" has been the standard tool for the identification of Central European beetles for decades. Published in 1964, volume 4 is the oldest part of this work and now out of print. It provides identification keys to all the staphylinid subfamilies, except for the Aleocharinae, Pselaphinae, and some smaller subfamilies that were moved to the Staphylinidae only after 1964. In the course of preparing the Paederinae and Xantholinini parts for a new edition of this volume, taxonomic and faunistic problems pertaining to various Central European species had to be addressed and clarified. These problems included taxa of uncertain status, doubtful names, and doubtful records from Central European regions. In this context, types and additional material from various public and private collections were studied, neo- and lectotypes were designated, and new synonymies were discovered.

Recently, two major catalogues of Staphylinidae were published, a world catalogue by HERMAN (2001) and a Palaearctic catalogue by LÖBL & SMETANA (2004). These catalogues are extremely useful tools not only for taxonomic, but also for faunistic and ecological sciences. One of the - sometimes less desirable - side-effects of screening and compiling primary and secondary literature sources, however, is that long-forgotten names tend to surface. These names are mostly old, often of doubtful identity, based on short and inadequate descriptions, and on type material that is usually lost, as is particularly the case with taxa described by authors such as Gistel, Grimmer, and Schrank. While the latter two are not even listed in standard catalogues of entomological collections (GAEDIKE 1995, HORN et al. 1990), the GISTEL collection is supposedly deposited in the Zoologische Staatssammlung München (HORN et al. 1990). However, attempts at finding type material in this collection have been unsuccessful. In order to avoid listing doubtful names in standard identification keys and catalogues, it seems advisable to dispose of them, usually by synonymising them with senior names. This procedure is applied below to all doubtful names in the Paederinae and Xantholinini described from Central European localities. Neotypes are designated only when long-established (junior) names are threatened.

I use this opportunity to address some additional issues pertaining to Paederinae and Xantholinini even if they are not related to the fauna of Central Europe, but to other parts of the Palaearctic region.

## 2. Material and methods

The material referred to in this study is deposited in the following public and private collections:

BMNH .....	The Natural History Museum, London (R. Booth)
DEI.....	Deutsches Entomologisches Institut, Müncheberg (L. Behne, L. Zerche)
HNHM .....	Hungarian Natural History Museum, Budapest (G. Makranczy, G. Szél)
MHNG .....	Museum d'Histoire Naturelle, Genève (G. Cuccodoro)
MHNL.....	Museum d'Histoire Naturelle, Lyon (J. Clary, H. Labrique)
MNE .....	Museum für Naturkunde, Erfurt (M. Hartmann)

MNG .....	Museum der Natur Gotha (R. Bellstedt)
MNHNP .....	Museum National d'Histoire Naturelle, Paris (A. Taghavian)
MNHUB.....	Museum für Naturkunde der Humboldt-Universität Berlin (J. Frisch, J. Willers)
NHMB .....	Naturhistorisches Museum Basel (E. Sprecher)
NHMW .....	Naturhistorisches Museum Wien (H. Schillhammer)
cAnl.....	private collection Sinan Anlaş, Turgutlu
cApf .....	private collection Wolfgang Apfel, Eisenach
cAss.....	author's private collection
cFel .....	private collection Benedikt Feldmann, Münster
cKas .....	private collection Vitaly Kastcheev, Almaty
cPüt .....	private collection Andreas Pütz, Eisenhüttenstadt
cRou .....	private collection Guillaume de Rougemont, Londinières
cSch.....	private collection Michael Schülke, Berlin
cWun.....	private collection Paul Wunderle, Mönchengladbach
cZan .....	private collection Adriano Zanetti, Verona

The morphological studies were carried out using a Stemi SV 11 microscope (Zeiss Germany) and a Jenalab compound microscope (Carl Zeiss Jena). For the photographs a digital camera (Nikon Coolpix 995) was used.

Head length was measured from the anterior margin of the frons to the posterior margin of the head, elytral length at suture from the apex of the scutellum to the posterior margin of the elytra.

The maps were generated using the online generic mapping tool (GMT) of the Geomar website at [www.aquarius.ifm-geomar.de/omc](http://www.aquarius.ifm-geomar.de/omc).

### 3. Results

#### 3.1. Paederinae

##### 3.1.1. *Astenus* DEJEAN 1833

##### On the subgenus *Astenognathus* REITTER 1909

The subgenus *Astenognathus* was described by REITTER (1909) to include seven species, among them *A. bimaculatus* (ERICHSON), which was subsequently designated as the type species by BLACKWELDER (1939). According to REITTER (1909) and later authors, *Astenognathus* is separated from *Astenus* DEJEAN 1833 (type species: *Staphylinus angustatus* PAYKULL 1789 = *S. gracilis* PAYKULL 1789) by the narrower abdomen, with tergites III-VI (without paratergites) at most twice as wide as long. This subgeneric concept has remained unquestioned ever since.

A study of various species previously attributed to *Astenus* and *Astenognathus*, however, yielded the following results:

a) The width of the anterior abdominal tergites is by no means a constant character among the species of either subgenus. Extreme character states are linked by fluent transitional conditions, suggesting that the width of the abdomen is an inadequate character for the separation of subgenera in *Astenus*.

b) This distinguishing character is neither clear-cut nor discreet. For instance, in *A. pulchellus* (HEER) - originally included in, and currently still attributed to *Astenognathus* - the anterior abdominal tergites are of exactly the same width as in *A. immaculatus* STEPHENS, which has been regarded as a representative of the subgenus *Astenus* by REITTER (1909) and subsequent authors.

c) Based on external characters such as the shape and chaetotaxy of the forebody, as well as on the morphology of the aedeagus, several species currently in *Astenognathus*, among them the type species *A. bimaculatus*, are close relatives of *A. gracilis* (type species) and other species in the subgenus *Astenus*. Also, these species are zoogeographically and ecologically similar in that they are widespread and not associated with ants, respectively.

d) There is some evidence that some species currently in *Astenognathus* (e. g. *A. procerus*, *A. uniformis*, and allied species) form a distinct lineage and may eventually have to be moved to a separate subgenus, possibly *Eurysunius* REITTER. However, this question can be decided only based on a thorough revision and will have to be considered in future studies.

In conclusion, there is no reasonable doubt that *Astenognathus* in the current sense is in fact a polyphyletic taxon. Based on the evidently close relationship of its type species, *A. bimaculatus*, to the type species of *Astenus*, *A. gracilis*, the following synonymy is proposed: *Astenus* DEJEAN 1833 = *Astenognathus* REITTER 1909, nov.syn.

### ***Astenus (Astenus) gracilis* (PAYKULL 1789) (Figs 1-2)**

*Astenus rutilipennis* REITTER 1909: 151; **nov.syn.**

**Type material examined:** Lectotype, present designation: "Hungaria bor., Kesmark / coll. Reitter / Paratypus *Astenus rutilipennis* Reitter 1909 [curator label] / *Astenus rutilipennis* ♀ [sic] Rtt., V.I.Gusarov det. 1993 / Lectotypus ♂ *Astenus rutilipennis* Reitter, desig. V. Assing 2008 / *Astenus gracilis* (Paykull) det. V. Assing 2008" (HNHM). **Paralectotypes:** 1 ♂ [dissected prior to present study]: "Kesmark / Hu. bor. / coll. Reitter / rutilipennis m. 1907 / Holotypus *Astenus rutilipennis* Reitter 1909 [curator label]" (HNHM); 1 ♀: "Manglis 1879" (HNHM); 1 ♀: "Manglis 1880" (HNHM); 1 ♀: "Caucasus, Araxesthal, Leder.Reitter" (HNHM).

**Comment:** The original description of *A. rutilipennis* is based on an unspecified number of syntypes from "Ungarn: Kesmark [today Kežmarok in Slovakia]; Kaukasus (Manglis), Araxesthal" (REITTER 1909). Five of them were found in the Reitter collection at the HNHM, two males from "Kesmark" and three females from "Manglis" and "Araxesthal". One of the males is designated as the lectotype. Like the male paralectotype, it is conspecific with *A. gracilis* (PAYKULL); the same is probably true of the female paralectotypes. The coloration of the elytra of the examined types differs from the usual condition in *A. gracilis* in that the blackish markings are reduced to a darker scutellar area and sometimes to an additional dark spot near the middle of the lateral margins, but the aedeagus is identical; for illustrations of the aedeagus of the male paralectotype of *Astenus rutilipennis* see Figs 1-2. Consequently, *A. rutilipennis* is placed in the synonymy of *A. gracilis*.

***Astenus (Astenus) misellus* (MULSANT & REY 1880)**

*Sunius misellus* MULSANT & REY 1880: 416.

**M a t e r i a l e x a m i n e d :** France: 1 ♂: "♂ / Lyon / Rey / misellus Rey / ex auctore / ex coll. Skalitzy / Cotypus *Astenus misellus* Rey" (NHMW).

**C o m m e n t :** The original description is based on an unspecified number of syntypes from "Saint-Raphael (Var)" (MULSANT & REY 1880). In the collection of the NHMW, a male originally from the Rey collection and labelled as a cotype was found. However, since it was not collected at the type locality, it does not have type status. Nevertheless, it was identified by the author of the species and it is in accordance with the interpretation of COIFFAIT (1984).

***Astenus (Astenus) procerus* (GRAVENHORST 1806)**

*Astenus (Astenognathus) noheli* COIFFAIT 1969: 73; **nov.syn.**

**T y p e m a t e r i a l e x a m i n e d :** *A. noheli*: Holotype ♂ [teneral]: "CSSR - Silesia, - P. Nohel, Starič, 3.IX.65 / Holotype / A. (Astenognathus) noheli Coiff., H. Coiffait det. 1966 / *Astenus procerus* (Gravenhorst) det. V. Assing 2008" (MNHN).

**C o m m e n t :** The original description of *A. noheli* is based on a single male from "Tchécoslovaquie, Silésie, Starič" (COIFFAIT 1969). An examination of the teneral holotype revealed that it refers to *A. procerus*. Hence the synonymy proposed above.

***Astenus (Astenus) unicolor* (MULSANT & REY 1878)**

*Sunius unicolor* MULSANT & REY 1878: 276 ff.

**T y p e m a t e r i a l e x a m i n e d :** Lectotype ♂, present designation: "♂ / Provence / Rey / unicolor Rey / ex auctore / ex coll. Skalitzy / ex coll. Scheerpeltz / Cotypus *Astenus unicolor* Rey / Lectotypus ♂ *Sunius unicolor* Mulsant & Rey, desig. V. Assing 2008 / *Astenus unicolor* Mulsant & Rey det. V. Assing 2008" (NHMW).

**C o m m e n t :** The original description is based on an unspecified number of syntypes from "le Languedoc, la Provence et la Guienne" (MULSANT & REY 1878). A male syntype was located in the collections of the NHMW; it is designated as the lectotype.

***Astenus (Astenus) pallidulus* (WOLLASTON 1864)**

*Sunius pallidulus* WOLLASTON 1864: 591 f.

*Astenus parviceps* RAGUSA 1891: 239.; **nov.syn.**

*Astenus antoinei* COIFFAIT 1980: 261; **nov.syn.**

*Astenus murreus* BORDONI 1994: 24 ff.; **nov.syn.**

**T y p e m a t e r i a l e x a m i n e d :** Holotype: "I - Lazio: Mezzomonte, Lago di Paola, 16.IX.1989, Assing / Holotypus / *Astenus murreus* n. sp. det. Bordoni 1992 / *Astenus pallidulus* (Wollaston) det. V. Assing 2008" (cAss). Paratypes: 2 ♀ ♀: same data as holotype (cAss); 1 ♂: "I - Sicilia [recte: Sardegna], am Licht, 25.IX.1987, Schmidt" (cAss).

**A d d i t i o n a l m a t e r i a l e x a m i n e d :** Spain: Canary Islands: 2 exs., La Gomera, Hermigua, 17.II.1974, leg. Oromí (cOro, cAss); 1 ex., La Gomera, Hermigua, 27.VI.1974, leg. Oromí (cAss). Spain, mainland: 2 exs., Andalucía, Huelva, El Rocio, Arroyo La Rocina, 24.IV.2003, leg. Ribera et al. (cAss)

**C o m m e n t :** The original description of *A. pallidulus* is based on three syntypes from Tenerife and La Gomera (WOLLASTON 1864). ISRAELSON (1971) designated a lectotype from Tenerife. He also - correctly - suspected *A. parviceps* RAGUSA, a name previously synonymised with *A. indicus* (KRAATZ 1859) by FAUVEL (1895) and still listed in the

synonymy of that name (SMETANA 2004), to represent a junior synonym of *A. pallidulus*. An examination of the type material of *A. murreus* BORDONI revealed that they, too, are conspecific with *A. pallidulus*. The original description of *A. antoinei* is based on a holotype male from "Maroc, Casablanca" deposited in the Jarrige collection at the MNHNP (COIFFAIT 1980). The specimen was not examined, but the figures of the aedeagus and the descriptive details provided by COIFFAIT (1980, 1984) leave no doubt whatsoever that the holotype of *A. antoinei* is conspecific with *A. pallidulus*. Hence the synonymies proposed above.

SMETANA (2004) reports the species only from the Canary Islands. The above material includes the first records from Morocco, the Spanish mainland, and Italy.

### ***Astenus (Astenus) bimaculatus* (ERICHSON 1840)**

*Sunius bimaculatus* ERICHSON 1840: 641.

Type material examined: Lectotype, present designation: "7165 / bimaculatus Er., Sardin. Gené / Syntypus *Sunius bimaculatus* Erichson, 1840, labelled by MNHUB 2008 / Lectotypus ♂ *Sunius bimaculatus* Erichson, desig. V. Assing 2008 / *Astenus bimaculatus* (Erichson), det. V. Assing 2008" (MNHUB). Paralectotypes: 2♂♂, 1♀, 1 sex? [abdomen missing]: same data as lectotype (MNHUB).

Comment: The original description is based on an unspecified number of syntypes from "Sardinia" collected by "Dom. Prof. Gené" (ERICHSON 1840). Five of them were located in the historical collection at the MNHUB. One of the males is designated as the lectotype.

### ***Astenus (Astenus) serpentinus* (MOTSCHULSKY 1858)**

*Sunius subditus* MULSANT & REY 1878: 278.

Type material examined: Lectotype, present designation: "♂ / Lyon / Rey / subditus Rey / ex auctore / Cotypus *Astenus subditus* Rey / ex coll. Skalitzky / ex coll. Scheerpeltz / Lectotypus ♂ *Sunius subditus* Mulsant & Rey, desig. V. Assing 2008 / *Astenus serpentinus* (Motschulsky), det. V. Assing 2008" (NHMW). Paralectotypes: 2♀♀: same data as lectotype (NHMW).

Comment: The original description of *Sunius subditus* is based on an unspecified number of syntypes from "les environs de Lyon et dans le Beaujolais" (MULSANT & REY 1878). Three syntypes, a male and two females were located in the collections of the NHMW; the male is designated as the lectotype.

### ***Astenus (Astenus) uniformis* (JACQUELIN DU VAL 1853) (Figs 78-80)**

*Sunius uniformis* JACQUELIN DU VAL 1853: 700 f.

*Sunius vestitus* MULSANT & REY 1878: 273 ff.; synonymy confirmed.

*Astenus maghrebinus* COIFFAIT 1960: 87; **nov.syn.**

Type material examined:

*S. uniformis*: Neotype, present designation: "Banyuls, 1-4.28 / Neotypus ♂ *Sunius uniformis* Jacquelin du Val, desig. V. Assing 2008 / *Astenus uniformis* (Jacquelin du Val), det. V. Assing 2008" (MNHNP).

*S. vestitus*: Syntype [remounted prior to present study]: "♀ [with original labels mounted on same label] / Lectotypus ♀ *Sunius vestitus* Mulsant & Rey, V. Gusarov des. 1995 / *Astenus uniformis* (JacqDuv.), Gusarov det. 1995 / Syntypus ♀ *Sunius vestitus* Mulsant & Rey, rev. V. Assing 2008 / *Astenus uniformis* (Jacquelin du Val), det. V. Assing 2008" (MNHNP).

**A d d i t i o n a l m a t e r i a l e x a m i n e d :** France: 1♂, Nice, leg. Grouvelle (MNHN); 1♀, Banyuls, V.1902, leg. Fagniez (MNHN); 1♀, Banyuls, 17.VII.1951, leg. Coiffait (MNHN). Morocco: 1♂, Tanger, leg. Quedenfeldt (cAss); 1♂, locality not specified (NHMW). Algeria: 1♂, Chebli, leg. Otto (NHMW); 1 ex., Oran, leg. Bedel (NHMW); 2 exs., "Algerien", leg. Otto (NHMW).

**C o m m e n t :** The original description of *Sunius uniformis* is based on an unspecified number of syntypes collected by Jacquelin du Val "aux environs de Montpellier" and by Philippe Lareynie "aux environs de Bordeaux" (JACQUELIN DU VAL 1853). Despite a careful and repeated search conducted by the curator in charge, the type material was not found in the collections of the MNHN, where the collection of Jacquelin du Val is deposited (TAGHAVIAN pers. comm). Therefore, the type material may be considered as lost. The designated neotype belongs to the only *Astenus* species matching the original description and distributed both in the southwest and the southeast of France, based on the current knowledge of the distributions of the species of the *A. procerus* group. The aedeagus of the neotype (Figs 78-80) is identical to that of the holotype of *A. maghrebinus* COIFFAIT, as can be inferred from the illustrations provided by COIFFAIT (1960), so that *A. maghrebinus* is placed in the synonymy of *A. uniformis*.

*Sunius vestitus* was originally described from few syntypes ("très-rare") from "les environs de Marseille" (MULSANT & REY 1978). The authors describe the characters of both sexes, so the type series was composed of at least two syntypes. However, only a single female was located in the Rey collection at the MHNL (CLARY pers. comm.), suggesting that the male is either lost or deposited in an unknown collection. The female syntype from the Rey collection has a lectotype label attached to it, but the designation was never published, so that the specimen has syntype status. In external characters, particularly the shape of the pronotum (the setae are broken off), it is identical to the neotype designated above.

The species is evidently widespread in the western Mediterranean region. It has been recorded from northwestern Africa (Algeria, Morocco) and from both southwestern and southeastern France, suggesting that it is also present in the Iberian peninsula. For additional Moroccan and Algerian localities see COIFFAIT (1960). Records from other regions such as Central Europe and Italy require confirmation; so far, all the examined specimens from there have proved to refer to other species. Records from the eastern Mediterranean are likely to be based on misidentifications.

### ***Astenus uniformis* auctt.**

**C o m m e n t :** The previous interpretations of *A. uniformis* by authors such as COIFFAIT (1960, 1984) and LOHSE (1964) are based on misidentifications. Clarification of the identity of the species recorded as *A. uniformis* from Switzerland has proved difficult. According to SMETANA (2004), *A. uniformis* has three junior synonyms. One of them, *A. humeralis* (ROTTENBERG 1870), is a homonym and is consequently not eligible. The oldest junior synonym is *A. diversicollis*; it was described by BAUDI DI SELVE (1870) from Cyprus and is thus most unlikely to be conspecific with any of the species occurring in the southwest of Central Europe. The third synonym, *A. vestitus* (MULSANT & REY 1878) was described from the environs of Marseille; it is conspecific with *A. uniformis* (JACQUELIN DU VAL), not with *A. uniformis* auctt. (see preceding section), so that currently no valid name appears to be available for this species. In order to rectify this confusion it seems wisest not make a new name available at present, but to deal with the matter in the broader context of a future revision of the genus.



### 3.1.2. *Rugilus* LEACH 1819

#### *Rugilus geniculatus* (ERICHSON 1839)

*Stilicus geniculatus* ERICHSON 1839a: 522.

Type material examined: Lectotype ♂, present designation: "geniculatus Er., Berol. Er. / Zool. Mus. Berlin, "Hist. Coll." Nr. 6402 / Syntype / *Rugilus geniculatus* Er., det. M. Schülke 1991 / Lectotypus ♂ *Stilicus geniculatus* Erichson, desig. V. Assing 2008 / *Rugilus geniculatus* (Erichson), det. V. Assing 2008" (MNHUB). Paralectotypes: 3 exs.: same data as lectotype (MNHUB).

Additional material examined: Germany: 1 ex., Niedersachsen, Oldenburg, Pestrup, 3.XI.1945, leg. Kerstens (MNHUB); 1 ex., Niedersachsen, NW Hannover, Helstorf, heathland, sifted, 2.I.1982 (cAss). Poland: 4 exs., Legnica (NHMW, cAss). Spain: 1 ex., Madrid, Sierra de Guadarrama, Navacerrada, 1800 m, 5.IX.2001, leg. Anichtchenko (cAss).

Comment: The original description is based on an unspecified number of syntypes. The type series in the historical collection of the MNHUB is composed of four specimens. A male in good condition is designated as the lectotype. It is in agreement with the interpretation of LOHSE (1964) and COIFFAIT (1984).

#### *Rugilus similis* (ERICHSON 1839)

*Stilicus similis* ERICHSON 1839a: 521 f.

Type material examined: Lectotype ♂, present designation: "Hist.-Coll. (Coleoptera), Nr. 6401, *Stilicus similis* Erichson, 1839, German., Sicil. / Zool. Mus. Berlin / Lectotypus ♂ *Stilicus similis* Erichson, desig. V. Assing 2008 / *Rugilus similis* (Erichson), det. V. Assing 2008" (MNHUB). Paralectotypes: 5 exs. [1 without abdomen]: same data as lectotype (MNHUB).

Additional material examined: Austria: 1 ex., Burgenland, Andau, 2.IX.1988 (cAss). Italy: 1 ex., Toscana, Montemignaio, 18.VIII.1987, leg. Bellin (cAss); 1 ex., Puglia, Prom. del Gargano, Vico, 650 m, 25.VIII.-6.IX.1986 (cAss); 1 ex., same data, but 600-800 m (cAss). Hungary: 1 ex., Bugac National Park, grassland, pitfall, 12.XI.1982, leg. Galle (cAss). Slovenia: 1 ex., Šobec, Sava, 7.V.1996, leg. Drovenik (cAss); 1 ex., Gornja Radgona, Police, 260 m, 11.VII.2005, leg. Drovenik (cAss). Greece: 1 ex., Pelopónnisos, Patras, wetland, 24.III.1985, leg. Assing (cAss). Turkey: 1 ex., Muğla, Gölgeli Dağları, 20 km NE Köyceğiz, above Ağla, 37°04'N, 28°44'E, 1710 m, 6.X.2002, leg. Assing (cAss); 1 ex., 1 ex., E Osmaniye, 1200-1700m, leg. Schubert (NHMW). Ukraine: 1 ex., lower part of Onestr river, "Kinburg", W Nadworny, 27.VIII.1988 (cAss).

Comment: According to the original description, *Rugilus similis* is identical with Gravenhorst's interpretation of *Paederus orbiculatus*. In the historical collection of the MNHUB six specimens were found that were originally attributed to *Stilicus orbiculatus* sensu Gravenhorst and later labelled as *S. similis*, so that all of them can be regarded as syntypes. A male is designated as the lectotype. It is in agreement with the interpretation of LOHSE (1964) and COIFFAIT (1984). According to SMETANA (2004), the species was previously unknown from Slovenia.

#### *Rugilus subtilis* (ERICHSON 1840)

*Stilicus subtilis* ERICHSON 1840: 631 f.

*Rugilus salicetorum* GISTEL 1857: 73; **nov syn.**

Type material examined: Lectotype ♂, present designation: "Hist.-Coll. (Coleoptera), Nr. 6400, *Stilicus subtilis* Erichson, 1840, German., Sicil. / Zool. Mus. Berlin / Lectotypus

♂ *Stilicus subtilis* Erichson, desig. V. Assing 2008 / *Rugilus subtilis* (Erichson), det. V. Assing 2008" (MNHUB). Paralectotypes: 3 exs.: same data as lectotype (MNHUB).

**A d d i t i o n a l m a t e r i a l e x a m i n e d :** Germany: 1 ex., Niedersachsen, Großenwieden, arable land, pitfall, 22.VI.1984, leg. Sprick (cAss); 1 ex., Hameln env., Düt, pitfall, XI.1988, leg. Sprick (cAss); 1 ex., Niedersachsen, S Hildesheim, Steinberg, mesobrometum, pitfall, VIII.1997 (cAss); 2 exs., 3 km NE Alfeld/Leine, Wernershöhe, 320 m, arable land, pitfall, IV.1998, leg. Schmidt (cAss); 1 ex., Niedersachsen, Stewede, III.1990, leg. Abmann (cAss); 1 ex., Rheinland-Pfalz, Odenheim, 18.V.1989, leg. Niehuis (cAss). Austria: 1 ex., Burgenland, Leitha-Gebirge, Zeilerberg, 24.VIII.1985, leg. Assing (cAss). Romania: 1 ex., Harghita, 6.5 km W Miercurea-Ciuc, Dombon Lina, 46°22'N, 25°43'E, 840 m, SE-slope with hazel, sifted, 10.I.2005, leg. Makranczy (cAss); 1 ex., same data, but 600-800 m (cAss). Turkey: 1 ex., Ankara, SE Ankara, Elma Dağı, 1300 m, base of hollow willow, 31.X.1995, leg. Vit (cAss).

**C o m m e n t :** The original description of *Stilicus subtilis* is based on an unspecified number of syntypes from "Austria, Dom. Schüppel" and "Saxonia montana, Dom. Märkel" (ERICHSON 1840). In the historical collection of the MNHUB, four specimens standing next to the labels "6400 / subtilis Dahl. Er., Austria Schüp., Saxon. Märkel" were located. The labels attached to the pins with the specimens were added recently, and the indication "German. Sicil." is probably erroneous. All four specimens are regarded as syntypes and a male is designated as the lectotype. It is in agreement with the interpretation of LOHSE (1964) and COIFFAIT (1984).

The nomen dubium *Rugilus salicetorum* GISTEL was described in the same article as the doubtful name in the following section. The original description is almost void of informative details regarding the identity of the species. Therefore, the name is placed in the synonymy of *Rugilus subtilis* (ERICHSON 1840).

### ***Rugilus rufipes* (GERMAR 1836)**

*Stilicus nematideus* GISTEL 1857: 19; **nov syn.**

**C o m m e n t :** The nomen dubium *Stilicus nematideus* GISTEL was made available in a widely neglected paper containing more than 800 non-informative descriptions of miscellaneous animals. With few exceptions, Gistel's type material, which according to HORN et al (1990) is deposited in the Zoologische Staatssammlung München, is lost (BAEHR pers. comm.).

The original description of *S. nematideus* best fits *Rugilus rufipes* ("Dunkelbraun,..., Kopf viereckig,..., Brustschild eiförmig,... Zu *Paederus scabricollis* gyl."). Hence the synonymy proposed above.

### ***Rugilus orbiculatus* (PAYKULL 1796)**

*Rugilus exiguus* HEER 1839: 233; **nov syn.**

**C o m m e n t :** The nomen dubium *Rugilus exiguus* HEER (SMETANA 2004) is based on type material from "Zürichberg..., Genf" (HEER 1839). The original description best fits *Rugilus orbiculatus* ("Caput subobiculare, latitudine fere elytrorum,... pronot. suborbiculatum,... elytra opaca, nigra, apice picea"), with which the name is synonymised.

### 3.1.3. *Cephisella* FAGEL 1961

#### *Cephisella rufa* (KRAATZ 1859)

*Acanthoglossa rufa* KRAATZ 1859: 146.

Type material examined: Lectotype ♀: "120 / Ceylon / coll. Kraatz / *A. rufa* / Holotypus [sic] / coll. DEI Müncheberg / Lectotypus ♂ *Acanthoglossa rufa* Kraatz, rev. V. Assing 2008 / *Cephisella rufa* (Kraatz), det. V. Assing 2008" (DEI).

Additional material examined: Oman: 1♂, Dhofar, 6.IX.1994, leg. Rihane (cAss); 1♀, Dhofar, Rouri, 6.IX.1994, leg. Rihane (cAss); 1♀, Dhofar, Rouri, 24.II.1994, leg. Rihane (cAss).

Comment: The original description is based on an unspecified number of syntypes from "Ceylan" (KRAATZ 1859). One of these syntypes, a female, is deposited in the Kraatz collection at the DEI. In using the term "Holotypus" for this specimen in a type catalogue, GAEDIKE (1981) unintentionally designated it as the lectotype. Originally described in the genus *Acanthoglossa* KRAATZ, the species was later transferred to *Cephisella* FAGEL (LECOQ 1986).

The additional material listed above represents the first records from Oman; in external morphology, the specimens are indistinguishable from the lectotype.

### 3.1.4. *Lithocharis* DEJEAN 1833

#### *Lithocharis ochracea* (GRAVENHORST 1802)

*Paederus ochraceus* GRAVENHORST 1802: 59.

Type material examined: Lectotype ♂, present designation: "6385 / ochracea, Paed. ochr. Gr. / Syntypus *Paederus ochraceus* Gravenhorst, 1802, labelled by MNHUB 2008 / Hist.-Coll. (Coleoptera), Nr. 6385, *Lithocharis ochracea* Gravenhorst, 1802, Europa - Amerika, Zoo. Mus. Berlin / Lectotypus ♂ *Paederus ochraceus* Gravenhorst, desig. V. Assing 2008 / *Lithocharis ochracea* (Gravenhorst), det. V. Assing 2008" (MNHUB). Paralectotypes: 5 exs.: same data as lectotype (MNHUB).

Additional material examined [see also ASSING (2000)]: Spain, Canary Islands: 1 ex., La Palma, La Grama, 5.IX.2000, leg. García (cAss); 2 exs., La Palma, San Antonio del Monte, 5.XII.2004, leg. García (cAss); 1 ex., Tenerife, Puerto de la Cruz, seaweed, 21.IX.1965, leg. Benick (cAss). Spain, mainland: 1 ex., Castilla-La Mancha, Madrigueras (AB), Rio Júcar, 1.VII.2005, leg. Lencina (cAss); 1 ex., Valencia, Alicante, Pinoso, Saladar del Rodriguillo, light, 26.VII.2008, leg. Lencina & Sánchez (cAss). Germany: 1 ex., Nordrhein-Westfalen, Dambroich, dung heap (horse), 28.XII.1985, leg. Siede & Wunderle (cAss); 1 ex., Schleswig-Holstein, Travemünde, cow dung, 27.VII.1983, leg. Assing (cAss); 1 ex., Niedersachsen, NW Hannover, Berenbostel, dung and compost, 5.VIII.1984, leg. Assing (cAss); 3 exs., Göttinger Wald, Westerberg, 26.VI.1990, leg. Borcherdig (cAss); 1 ex., Thüringen, Erfurt, 11.IX.1943, leg. Heidenreich (NHMW). Italy: 1 ex., Puglia, Ris. WWF Le Cesine, S. Cataldo (LE), VI.1995, leg. Angelini (cAss); 1 ex., Puglia, Prom. del Gargano, 25.VIII.-6.IX.1986 (cAss); 1 ex., Sardegna, Siniscola, at light source, 21.IX.1987, leg. Wunderle (cAss). Czech Republic: 6 exs., Praha, leg. Skalitzky (NHMW, cAss). Israel: 1 ex., Hagalil, Aksiv Beach, 18.VI.1981, leg. Kiener (MHNG). Egypt: 1 ex., 23 km S Cairo, Dahshur, 29°48'N, 31°14'E, light trap, 29.V.1996, leg. Ullrich (cAss); 1 ex., Cairo env., Maadi, light trap, 18.X.1996, leg. Ullrich (cAss). Kazakhstan: 1 ex., Syrdaria river, Djetyesai, 5.V.1980, leg. Kastcheev (cAss).

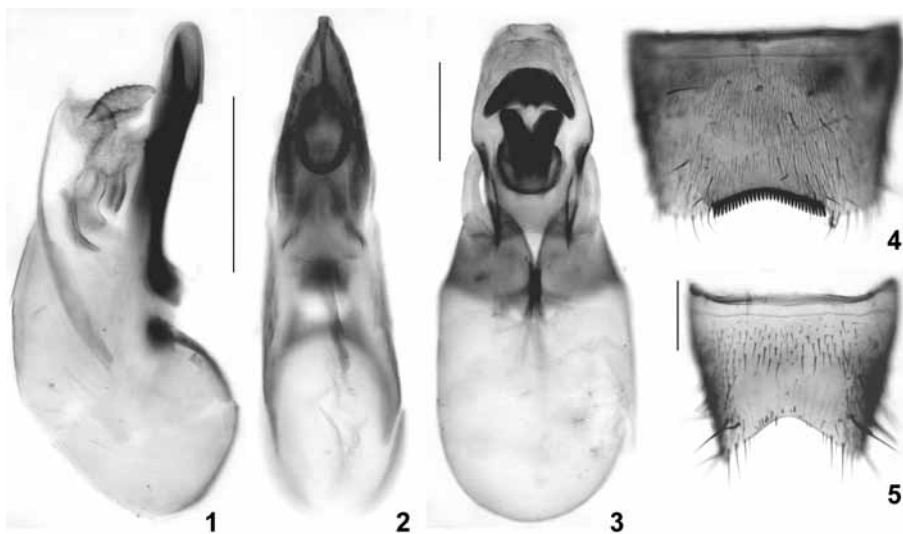
Comment: The original description is based on an unspecified number of syntypes. A male from the type series in the collections of the MNHUB, which is composed of six specimens, is designated as the lectotype. It is in agreement with the interpretation of LOHSE (1964) and COIFFAIT (1984).

***Lithocharis vilis* KRAATZ 1859***Lithocharis vilis* KRAATZ 1859: 159.

Type material examined: Lectotype ♂, present designation: "♂ / 91 / Ceylon / *Lithocharis vilis* Krtz. / Syntypus / coll. Kraatz / coll. DEI Müncheberg / Lectotypus ♂ *Lithocharis vilis* Kraatz, desig. V. Assing 2008 / *Lithocharis vilis* Kraatz, det. V. Assing 2008" (DEI). Paralectotypes: 6 exs.: "Ceylon / Syntypus / coll. Kraatz / coll. DEI Müncheberg" (DEI); 1 ♀: "India orient. / Syntypus / coll. Kraatz / coll. DEI Müncheberg / Medonini gen. sp. det. V. Assing 2008" (DEI).

Additional material examined: see ASSING (2000) and ASSING & SCHÜLKE (2006).

Comment: The original description is based on an unspecified number of syntypes from "Ceylan" and "India orientali" (KRAATZ 1859). The type series in the Kraatz collection is composed of eight specimens, seven of them from Ceylon and one from "India orient." The latter is clearly not conspecific and probably not even congeneric with the specimens from Ceylon. A male from Ceylon is designated as the lectotype. It is in agreement with the interpretation of *L. vilis* of COIFFAIT (1984).



**Figs 1-5:** Paralectotype of *Astenus rutilipennis* REITTER (1-2) and Lectotype of *Lithocharis vilis* KRAATZ (3-5): (1-3) aedeagus in lateral and in ventral view; (4) male sternite VII; (5) male sternite VIII. Scale bars: 0.2 mm.

***Lithocharis nigriceps* KRAATZ 1859 (Figs 3-5)***Lithocharis nigriceps* KRAATZ 1859: 159.

Type material examined: Lectotype ♂, present designation: "♂ / Ceylon / Syntypus / coll. Kraatz / coll. DEI Müncheberg / Lectotypus ♂ *Lithocharis nigriceps* Kraatz, desig. V. Assing 2008 / *Lithocharis nigriceps* Kraatz, det. V. Assing 2008" (DEI). Paralectotypes: 5 exs.

[2 without abdomen, 1 without head]: same data as lectotype, one of them with additional labels "160" and "nigriceps" (DEI).

**A d d i t i o n a l m a t e r i a l e x a m i n e d :** France: 1 ex., Pyrénées-Atlantiques, St. Jean Pied de Port, VIII.1997, leg. Aßmann (cFel). Germany: 2 exs., Nordrhein-Westfalen, Münster, 25.III.1990, leg. Feldmann (cFel, cAss); 1 ex., N-Münster, compost, VIII.1995, leg. Feldmann (cFel); 1 ex., Schleswig-Holstein, Lübeck, Schellbruch, flood debris, 4.XI.1995, leg. Siede (cAss); 1 ex., Niedersachsen, Bad Nenndorf, compost, 22.VII.1984, leg. Assing (cAss); 1 ex., Niedersachsen, Hameln env., Königsförde, compost, 20.III.1983, leg. Sprick (cAss); 1 ex., Hessen, Seeheim-Jugenheim, fallow, sifted, 7.II.2003, leg. Hetzel (cFel); 3 exs., Sachsen, Leipzig, Cospuden, pond margin, sifted, 18.IV.1959, leg. Dieckmann (DEI). Austria: 7 exs., Niederösterreich, Tullnerbach, leg. Scheerpeltz (NHMW, cAss). Turkey: 1 ex., Rize, 25 km SE Rize, 40°54'N, 40°46'E, 860 m, mixed forest, 2.VIII.2006, leg. Assing (cAss). Kazakhstan: 1 ex., Ile river, splay, 21.VIII.1982, leg. Kastcheev (cAss); 1 ex., Ile river, Buryndysu, 10.VI.1982, leg. Kastcheev (cKas). Japan: 2 exs., Kanagawa, VIII.1906, leg. Sauter (DEI). Canada: 1 ♀, Québec, Parc du Pic, SW Rimouski, 48°21'N, 68°48'W, 0 m, 11.VIII.2005, leg. Assing (cAss).

**C o m m e n t :** The original description is based on an unspecified number of syntypes from "Ceylan" (KRAATZ 1859). A male in good condition, which had been dissected prior to the present study, is designated as the lectotype. It is in agreement with the interpretation of LOHSE (1964), but evidently not with that of COIFFAIT (1984). The primary and secondary sexual characters of the lectotype are illustrated in Figs 3-5. The species is newly reported from Kazakhstan.

#### ***Lithocharis subochracea* COIFFAIT 1966**

**M a t e r i a l e x a m i n e d :** Spain: Canary Islands: 1 ♂, El Hierro, Las Playas, Los Cordones, 27°43'N, 17°58'W, 10-30 m, plant debris, 29.XII.1999, leg. Assing (cAss).

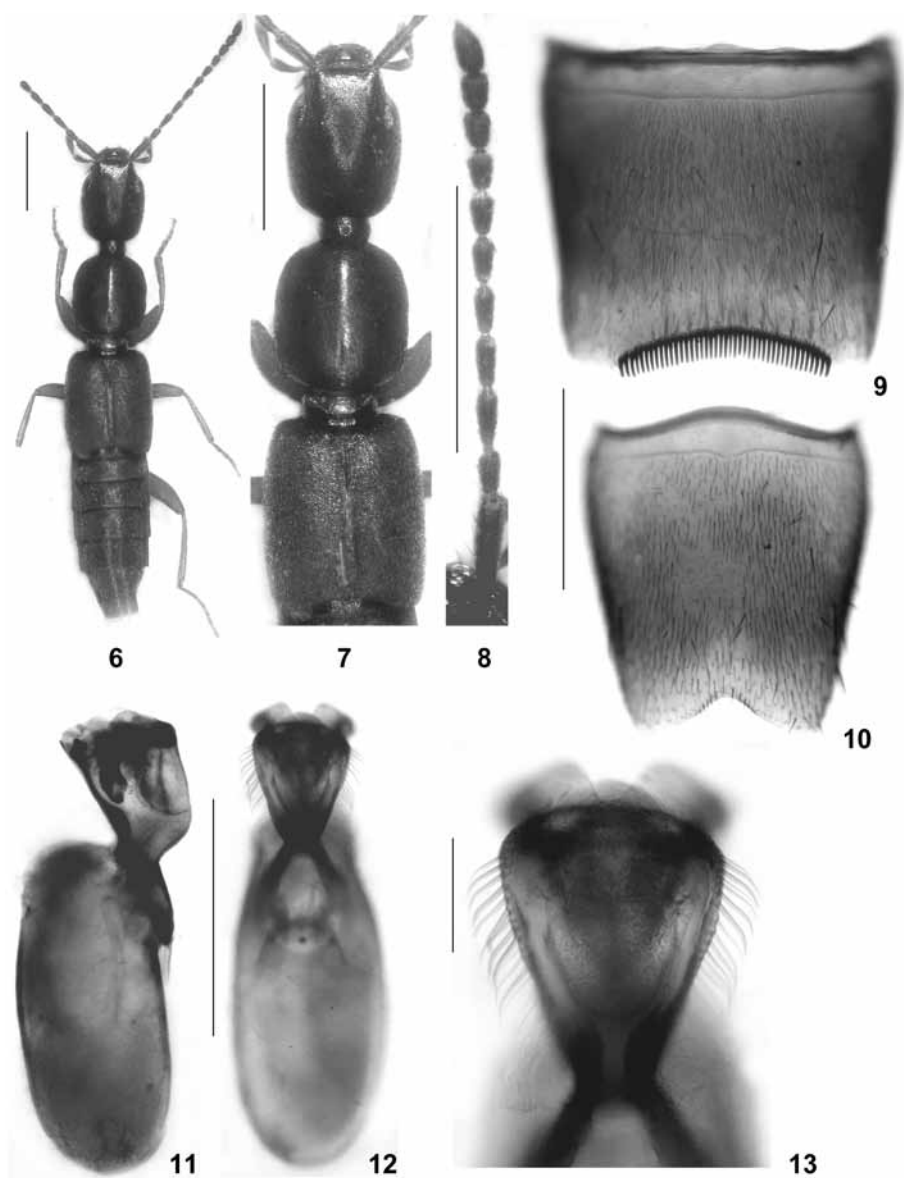
**C o m m e n t :** The species was originally described from Mauretania. The above specimens represents the first record from the Canary Islands and from the Palaearctic region.

#### ***Lithocharis schuelkei* nov.sp. (Figs 6-13)**

**T y p e m a t e r i a l :** Holotype ♂: W Yemen, Jabal Bura', 557 m, NEE Al Hudaydah, N14°53', E43°26' (light), 9.-21.III.2007, M. Rejzek [3] / Holotypus ♂ *Lithocharis schuelkei* sp. n. det. V. Assing 2008 2 (cAss).

**D e s c r i p t i o n :** Measurements (in mm) and ratios: length of antenna: 2.16; head length from anterior margin of frons to posterior margin of head (HL): 1.03; head width (HW): 0.77; length of pronotum (PL): 1.04; width of pronotum (PW): 0.92; length of elytra at suture from apex of scutellum to posterior margin (EL): 1.04; combined width of elytra (EW): 1.10; width of abdomen at segment V (AW): 0.95; length of metatibia (TiL): 0.91; length of metatarsus (TaL): 0.79; length of median lobe of aedeagus from apex of ventral process to base: 0.88; total length: 6.05; HL/HW: 1.33; PW/HW: 1.20; PL/PW: 1.13; EL/PL: 1.00; EW/PW: 1.20; AW/EW: 1.16; TiL/TaL: 1.15.

Habitus as in Fig. 6. Head distinctly oblong (see measurements and ratio HL/HW) and of oval shape; punctation very fine and dense; microsculpture present; pubescence short and depressed. Eyes large, but weakly projecting from lateral contours of head; postocular region approximately 1.5 times as long as eyes in dorsal view (Fig. 7). Antenna slender; antennomere III slightly longer than II; III-X of gradually decreasing length; X oblong (Fig. 8).



**Figs 6-13:** *Lithocharis schuelkei* nov.sp.: (6) habitus; (7) forebody; (8) antenna; (9) male sternite VII; (10) male sternite VIII; (11-12) aedeagus in lateral and in ventral view; (13) ventral process of aedeagus in ventral view. Scale bars: 6-8: 1.0 mm; 9-12: 0.5 mm; 13: 0.1 mm.

Pronotum weakly oblong and distinctly wider than head (see ratios PW/PL and PW/HW); punctation even finer than that of head; microsculpture present; barely visible rudiment of impunctate midline present in posterior half; pubescence very short, depressed, and inconspicuous (Fig. 7).

Elytra wider than, and at suture as long as pronotum; punctation extremely dense, more distinct than that of head (Fig. 7). Hind wings fully developed. Legs moderately long (see measurements and ratio TiL/TaL); metatarsomere I approximately as long as the combined length of II-III.

Abdomen narrower than elytra (see ratio AW/EW), widest at segments V/VI (Fig. 6); punctation very fine and dense; microsculpture distinct; posterior margin of tergite VII with palisade fringe; posterior margin of tergite VIII weakly convex.

♂: posterior margin of sternite VII weakly concave and with long comb of black palisade setae (Fig. 9); posterior margin of sternite VIII with rather shallow and broad excision, on either side of middle with row of 5 marginal setae (Fig. 10); aedeagus shaped as in Figs 11-12, ventral process on either side with fringe of setae (Fig. 13).

♀: unknown.

**E t y m o l o g y :** The species is gratefully dedicated to my colleague and friend Michael Schülke, who made the specimen available to me, also in appreciation of the generous gift of the holotype.

**C o m p a r a t i v e n o t e s :** The new species is readily distinguished from all other Palaearctic species of the genus by external characters alone: its large size, the oblong and oval-shaped head, the morphology of the antennae, and the long elytra. In addition, it is separated from its congeners by the male primary and secondary sexual characters.

**D i s t r i b u t i o n a n d b i o n o m i c s :** The type locality is situated in western Yemen, where the holotype was collected at a light source at an altitude of approximately 560 m, suggesting that the species may be widespread in eastern Africa and the Arabian peninsula.

### 3.1.5. *Pseudomedon* MULSANT & REY 1878

#### *Pseudomedon huetheri* (HUBENTHAL 1927)

*Medon Hütheri* HUBENTHAL 1927: 42 f.

*Medon Hütheri helveticus* KOCH 1938: 104 ff.; **nov.syn.**

**T y p e m a t e r i a l e x a m i n e d :** *M. huetheri*: Lectotype ♂, present designation: "♂ / Münch. Isar, Hochwasser / Hüther donavit / ex coll. Scheerpeltz / Cotypus Medon Hütheri Hubenthal / Lectotypus ♂ *Medon huetheri* Hubenthal, desig. V. Assing 2008 / *Pseudomedon huetheri* (Hubenthal) det. V. Assing 2008" (NHMW). Paralectotypes: 1 ♀: "Münch. Isar, Hochwasser / Hütheri / Emmerich Reitter vend. I.1940 / ex coll. Scheerpeltz" (NHMW); 1 ♀: "München. / Fredmanniger Heide, Frühjahr 1922, M. Hüther / im Fluge / Hütheri Hbthl. Type. / muss Fröttmaninger Heide heissen, Ent. Bl. 1927 / Samml. Hubenthal" (MNG/MNE).

*M. huetheri helveticus*: Lectotype ♂, present designation: "Capo Lago, Bernhauer / Euphonus Apfelbecki Bh. det C. Koch / helveticus Koch, det. C. Koch / Holotype 1956, det. Kamp / Lectotypus ♂ *Medon huetheri helveticus* Koch, desig. V. Assing 2008 / *Pseudomedon huetheri* (Koch), det. V. Assing 2008" (NHMB).

**A d d i t i o n a l   m a t e r i a l   e x a m i n e d :** Germany: 3 exs., München, Gr. Hesseloh, Isar, flood debris, 1.IX.1928 (MNE, MNG, MNHUB); 1 ex., same data, but 28.V.1939 (cSch); 7 exs., München, 24.VIII.1931 (MNHUB, cAss); 1 ex., München, Grünwald, Isar, flood debris, 21./24.VIII.1929, leg. Stöcklein (NHMW) 1 ex., Wolfratshausen, Isar, flood debris, 12.V.1930, leg. Stöcklein (NHMW). Switzerland: 1 ex., Genève env., Allondon, Russin (cAss); 3 exs., Ticino, Capolago, leg. Bernhauer (NHMW, cAss).

**C o m m e n t :** The original description of *Medon huetheri* is based on two syntypes from "München in der Fredmanniger Heide" and several syntypes collected "in diesem Jahre" (i. e. in 1926 or 1927) "an der Isar im Angeschwemmten des Hochwassers im Juni und Juli in mehreren ausgefärbten Stücken" (HUBENTHAL 1927). One of the syntypes, a female, was located in the Hubenthal collection. Two additional syntypes, a male and a female, were found in the collections of the NHMW; the male is designated as the lectotype. The species is conspecific with the interpretation of LOHSE (1964).

*Medon huetheri helveticus* was described from an unspecified number of syntypes from "Capo Lago", today Capolago in Ticino (Switzerland), collected by Bernhauer (KOCH 1938). A male syntype was located in the Frey collection at the NHMB and is designated as the lectotype. A comparison of this specimen with material of *P. huetheri* from Germany confirmed that it differs by smaller eyes (little more than half as long as postocular region in dorsal view), as well as by slightly shorter and more slender elytra with less pronounced humeral angles. The male primary and secondary sexual characters, however, are identical. The presence of a distinct subspecies of a potentially flying species in Switzerland would not seem plausible for zoogeographic reasons. Therefore, it seems most likely that *P. huetheri* is a (wing-) dimorphic species, this dimorphism also involving eye size. A similar dimorphism has been observed also in other Paederinae, e. g. *Micrillus* RAFFRAY (ASSING 2008a). Consequently, *M. huetheri helveticus* is synonymised with *M. huetheri*.

*Pseudomedon huetheri* was previously placed in the subgenus *Euphonus* FAUVEL 1902 (type species: *Euphonus pallidus* FAUVEL 1902), a taxon of highly doubtful status. A comparative study of *P. huetheri*, *P. obscurellus*, and *P. obsoletus* (NORDMANN 1837), type species of *Pseudomedon*, yielded no evidence whatsoever that they should belong to different subgenera. Therefore, *P. huetheri* is placed in the nominal subgenus. An examination of *P. pallidus* will be required to clarify the status of *Euphonus*.

### ***Pseudomedon obsoletus* (NORDMANN 1837)**

**M a t e r i a l   e x a m i n e d :** Spain: 1 ex., Galicia, Lugo, Monforte de Lemos, light source, 24.V.-5.VI.2001, leg. Valcárcel (cSch); 1 ex., same data, but 30.V.-17.VI.2002 (cSch); 1 ex. [teneral], same data, but 20.-26.VI.2001 (cSch). Italy: 1 ex., Toscana, 50 km W Firenze, Padule del Fucecchio, 16.VI.1992, leg. Assing (cAss); 4 exs., Puglia, San Cataldo (LE), Riserva WWF Le Cesine, 14.-17.VII.1995, leg. Angelini (cAss). Germany: 2 exs., Brandenburg, Storkow env., NSG "Salzstelle Philadelphia", sifted from straw, 24.III.1984, leg. Schülke (cSch); 1 ex., Brandenburg, moist meadows between Philadelphia and Storkow, 8.IV.2006, leg. Schülke (cSch); 15 exs., Brandenburg, Gosen near Berlin, NSG "Wernsdorfer See", meadow, sifted from reed heap, 11.II.1984, leg. Schülke (cSch, cAss); 1 ex., Mecklenburg-Vorpommern, Hiddensee island, Neuendorf, Weststrand, sifted from beach debris, 25.VI.1991, leg. Schülke & Grünberg (cSch); 1 ex., Baden, Griesheim env., bank of Rhein river, 1.VI.2000, leg. Schülke (cSch). Austria: 1 ex., Vorarlberg, N Gaißau, flooded meadow near shore of Bodensee, 14.V.1999, leg. Schülke (cSch); 4 exs., Burgenland, Neusiedler See, Weiden am See, flood debris, 7.IV.1991, leg. Sprick (cAss); 2



exs., Neusiedler See, Podersdorf, flood debris, 7.IV.1991, leg. Sprick (cAss); 6 exs., Neusiedlersee, leg. Ganglbauer, Wagner (NHMW, cAss). Greece: 21 exs., Thessalia, NE Ossa Oros, Stómio, 39°50'N, 22°43'N, 10 m, floodplain forest, 5.IV.1998, leg. Assing, Schülke (cAss, cSch); 5 exs., Pelopónnisos, Korinthia, Lake Stímfolia, 6.V.1999, leg. Angelini (cAss); 1 ex., Pelopónnisos, NE Kalavrita, bank of Vouraikos river, 38°05'N, 22°10'E, 700 m, 30.III.1997, leg. Assing (cAss). Turkey: 4 exs., Istanbul, Belgrader Wald, 4.VI.1967, leg. Besuchet (cAss); 1 ex., Çanakkale, 25 km S Kumkale, Beşik Koyu ["Besika Bay", ca. 39°49'N, 26°10'E], leg. Walker (BMNH); 1 ex., Erzurum, Azort, 12.V.1967, leg. Besuchet (cAss); 2 exs., Muğla, Köyceğiz Gölü, 36°55'N, 28°42'E, 10 m, flood debris, 28.III.2002, leg. Assing (cAss); 1 ex., Kayseri, Sultansazlığı, 1000 m, 6.V.1978, leg. Besuchet & Löbl (cAss). Georgia: 1 ex., Tbilisi, Lisi, 19.VI.-13.VII.1988, leg. Wrase (Sch). Kazakhstan: 1 ex., Karachaganak, Abai, 24.IX.1989, leg. Kastcheev (cAss); 8 exs., Ile river, Karagach, 20.IX.1986, leg. Kastcheev (cAss); 2 exs., Ile river, Aidarly, 6.X.1984, leg. Kastcheev (cAss); 5 exs., same data, but 12.IV.1984 (cAss, cKas); 1 ex., same data, but 22.IV.1984 (cKas); 8 exs., same data, but 16.IV.1983 (cAss); 2 exs., Ile river, Buryndysu, 10.VI.1982, leg. Kastcheev (cAss, cKas); 1 ex., Tasutkol lake, 9.V.1985, leg. Kastcheev (cKas).

**C o m m e n t :** The species is widespread in the Western Palaearctic region and has been reported also from the Afrotropical, Australian, and Nearctic regions (SMETANA 2004). It is newly reported from Kazakhstan and Middle Asia.

### ***Pseudomedon obscurellus* (ERICHSON 1840) (Figs 14-27)**

*Lithocharis obscurella* ERICHSON 1840: 624.

*Scymbalum minimum* EPPELSHEIM 1888: 408 f.; **nov.syn.**

*Medon apfelbecki* BERNHAUER 1899: 25; **nov.syn.**

**Type material examined:** *L. obscurella*: Syntype ♂: "6387 / obscurella Er., Sardin. Gené / Syntypus Lithocharis obscurella Erichson, 1840, labelled by MNHUB 2008 / Pseudomedon obscurellus (Erichson) det. V. Assing 2008" (MNHUB).

*S. minimum*: see ASSING (2008a).

*M. apfelbecki*: see ASSING (2008a).

**A d d i t i o n a l m a t e r i a l e x a m i n e d :** Morocco: 1 ex., Haut Atlas, 40 km SSE Marrakech, Arbbalou, 31°19'N, 7°45'W, 1030 m, 28.XII.2002, leg. Assing (cAss); 1 ex., Haut Atlas, NE Tizi-n-Test, 30°54'N, 8°19'W, 1710 m, 30.XII.2002, leg. Assing & Wunderle (cAss). Portugal: Madeira: see ASSING & SCHÜLKE (2006). Spain: 1 ex., Castilla-La Mancha, Sierra de Segura, 10 km N Yeste, Rio Tús, 38°25'N; 2°19'W, 10.IV.2003, leg. Assing & Wunderle (cAss); 6 exs., Andalucía, Puerto de Galis env., road to Alcalá de Guadaira, 36°32'N, 5°38'W, 400 m, stream valley, 20.II.2000, leg. Meybohm (cAss); 1 ex., Andalucía, Puerto de Galis env., Cerro de la Novia, 36°36'N, 5°29'W, 500 m, stream valley, 19.II.2000, leg. Meybohm (cAss); 1 ex., Andalucía, Valle de Ojen, 36°11'N, 5°35'W, 300 m, oak forest, 20.II.2000, leg. Lompe (cAss); 1 ex., Cádiz, Sierra de Bermeja, Jubrique, 500 m, 26.III.1994, leg. Assing (cAss); 1 ex., Cádiz, Jimena de la Frontera, 5.-6.VI.1991, leg. Wrase (cSch). Italy: 2 exs., Lombardia, SE Pavia, 8.X.1961, leg. Rosa (NHMW, cAss); 3 exs., Friuli-Venezia Giulia, SE Villesse, bank of Isonzo river, 45°51'N, 13°27'E, 10 m, flood debris, 13.IX.1998, leg. Schülke (cSch); 3 exs., Friuli-Venezia Giulia, Codroipo, bank of Tagliamento river, 45°57'N, 12°55'E, flood debris, 12.IX.1998, leg. Schülke (cSch); 5 exs., Sardegna, Monti Sette Fratelli, leg. Krüger (NHMW, cAss); 1 ex., Sicilia, Taormina env., 25.III.2006, leg. Hlaváč (cAss); 1 ex., E Cesaró, gravel bank of Cutò river, 37°50'N, 14°48'E, 2.IV.2001, leg. Schülke (cSch). Germany: 4 exs., Nordrhein-Westfalen, Hürth near Köln, waste dump Ville, 27.III.1989, leg. Köhler (cSch, cAss); 1 ex., Niedersachsen, Hannover, Eilenriede, car-net, 1.IV.1991, leg. Assing (cAss); 1 ex., Hannover env., Kananohe, car-net, 11.VII.1991, leg. Assing (cAss); 10 exs., Berlin-Spandau, Deponie Hahneberg, sifted from wood and compost, 24.VIII.2004, leg. Wrase (cSch, cAss); 1 ex., Sachsen, Chemnitz, waste dump, 24.X.1987, leg. Peschel (cSch). Croatia: 1 ex. ["*apfelbecki*" morph], Metkovi (NHMW). Bosnia-Herzegovina [see also ASSING (2008a)]: 1 ex. ["*apfelbecki*" morph], Sarajevo (cAss); 1 ex. ["*apfelbecki*" morph],

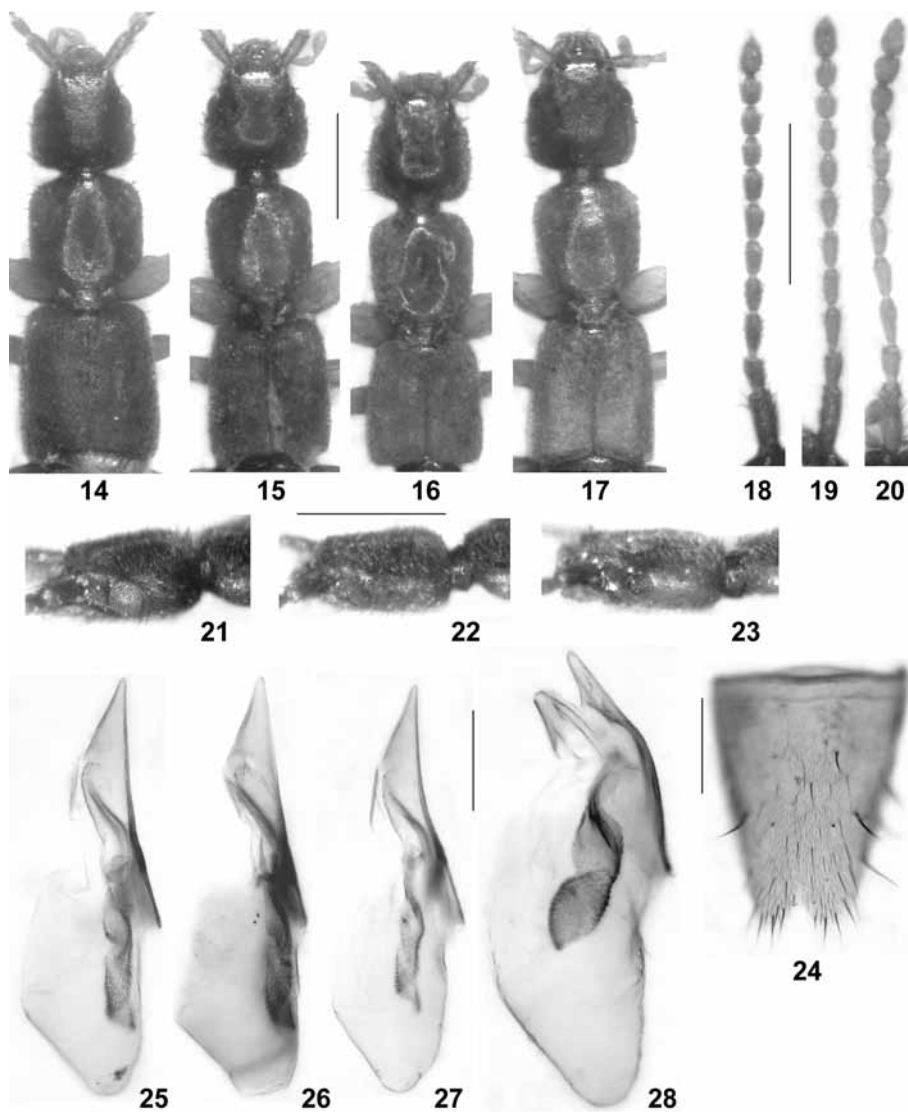
"Sutorina" [?], leg. Apfelbeck (cAss); 1 ex. ["*apfelbecki*" morph], locality not specified (NHMW). Albania: 2 exs. ["*apfelbecki*" morph], Skutari, leg. Mader (NHMW). Bulgaria: 1 ex., Wasil Lewski, 2.-5.V.1985, leg. Wrase (cSch); 1 ex., Strumjani, 30.IV.1985, leg. Wrase (cSch). Greece: 1 ex., Chalkidiki, Kassandra, Policoro, gravel pit, 26.III.1989, leg. Assing (cAss); 1 ex., Kassandra, Policoro, 26.III.1989, leg. Assing (cAss); 1 ex., Kassandra, Siviri, stream bank, 23.III.1989, leg. Assing (cAss); 1 ex., Thessalia, NE Ossa Oros, W Stomia, 39°54'N; 22°38'E, floodplain forest, 5.IV.1998, leg. Assing (cAss); 2 exs. [intermediate morph], Fokis, 25 km SW Lamia, Stomi, 38°41'N, 22°13'E, 640 m, river bank, 6.IV.2001, leg. Assing (cAss); 4 exs. [1 ex. intermediate morph], Fthiotis, SW Lamia, bank of Inachos river, 38°50'N, 22°05'E, 5.IV.2001, leg. Assing, Lompe & Wunderle (cAss); 1 ex. ["*apfelbecki*" morph], Fthiotis, 40 km W Lamia, bank of Sperchios river, 38°56'N, 21°59'E, 16.IV.2000, leg. Assing (cAss); 1 ex., Pelopónnisos, NE Kalavrita, bank of Vouraikos river, 38°05'N, 22°10'E, 700 m, 30.III.1997, leg. Assing (cAss); 1 ex., Pelopónnisos, Sparta, stream bank, 2.IV.1986, leg. Assing (cAss); 1 ex., Crete, Plakias, 31.III.1988, leg. Winkelmann-Klöck (cAss). Ukraine: 1 ex., Crimea, Evpatoria region, VII.1999 (cSch). Turkey [see also ASSING (2007b)]: 1 ex., Antalya, Side, 13.III.2000, leg. Esser (cAss); 1 ex., Antalya, Manavgat env., 0-50 m, 2.I.1991, leg. Assing (cAss). Georgia: 5 exs., Mzcheta near Tbilisi, flood debris, VI.1987, leg. Wrase (Sch). Chile: 4 exs., Araucania, Cautin province, Termas del Huife, 27 km ENE Pucón, 39°14'S, 71°39'W, compost sifted, 2.I.2006, leg. Schülke (cSch).

**C o m m e n t :** The original description of *Lithocharis obscurella* is based on an unspecified number of syntypes from "Sardinia" and collected by "Dom. Prof. Gené" (ERICHSON 1840). The single female syntype in the historical collection of the MNHUB is in agreement with the interpretation of LOHSE (1989).

*Medon apfelbecki* was described from several syntypes collected in the environs of Sarajevo by V. Apfelbeck. According to BERNHAUER (1899), the species is distinguished from *Pseudonmedon obscurellus* by pale yellowish-red coloration, small eyes, the shape of the pronotum, shorter elytra, and a flatter body. Like *Scymbalium minimum*, the name was previously treated as a synonym of *Pseudomedon dido* (SAULCY) (ASSING 2008a, COIFFAIT 1984, SMETANA 2004).

A comparative study of material from the Balkans matching the original description of *P. apfelbecki* and of material of *P. obscurellus* from various regions revealed that, indeed, the external differences - particularly in coloration, eye size, and also the morphology of the antennae - are remarkable. The male sexual characters (morphology of the aedeagus, shape of sternite VIII), however, are completely identical (Figs 24-27). Moreover, some of the specimens examined from Greece are intermediate: coloration and, in some specimens, also the antennae are similar to macrophthalmous specimens from Western and Central Europe, but the eyes are as small and the elytra as short as in *P. apfelbecki* (Figs 14-23). In addition, the aedeagus is generally highly distinctive in the genus and similar polymorphisms have been observed not only in various other paederine genera (e. g. *Micrillus*), but also in *Pseudomedon* (see section on *P. huetheri*). These findings suggest that *P. obscurellus* is polymorphic and that the Balkans material previously identified as *P. apfelbecki* or *P. dido* is conspecific with *P. obscurellus*, but not with the true *P. dido* (see the following section). Hence, the synonymies proposed above.

The above specimens from Chile represent a new country record, as well as the first record of this species not only from South America, but also from outside the Western Palaearctic region.



**Figs 14-28:** *Pseudomedon obscurellus* (ERICHSON) (14-27; 14, 18, 21, 25: macrophthalmous specimens from Germany; 15-16, 19, 22, 26: intermediate morph from Greece; 17, 20, 23-24, 27: "apfelbecki" morph from Bosnia-Herzegovina) and *P. dido* (SAULCY) (28): (14-17) forebody; (18-20) antenna; (21-23) head in lateral view; (24) male sternite VIII; (25-28) aedeagus in lateral view. Scale bars: 14-23: 0.5 mm; 24: 0.2 mm; 25-28: 0.1 mm.

***Pseudomedon dido* (SAULCY 1865) (Fig. 28, Map 1)**

*Lithocharis dido* SAULCY 1865: 651.

**A d d i t i o n a l m a t e r i a l e x a m i n e d :** Greece: 1♂, Lesbos, Labou Mili, 39°08'N, 26°23'E, 110 m, leg. Meybohm (cAss). Turkey: 2 exs., Çamlıyayla, 10.V.-3.VI.1963, leg. Schubert (NHMW, cAss); 4 exs., Antalya, 2 km NW Arif, 36°31'N, 30°01'E, 800 m, 26.III.2001, leg. Rose (cAss, cRos); 1 ex., Antalya, Yarbaşı, 36°45'N, 30°20'E, bank of stream, under stone, 29.III.2001, leg. Rose (cAss); 1 ex., Antalya, E Kumluca, 36°22'N, 30°22'E, 390 m, 3.IV.2002, leg. Assing & Wunderle (cAss); 1 ex., Burdur, Çeltikçi, 850 m, 5.V.1975, leg. Besuchet & Löbl (MHNG, cAss).

**C o m m e n t :** The original description is based on a female holotype from "le Sahel syrien, près de Soûr (Tyr)" (SAULCY 1865). Based on the distributional data presented above, it seems most likely that the examined material, which is in perfect agreement with the original description, is conspecific with the holotype. In external appearance, it is practically indistinguishable from the "*apfelbecki*" morph of *P. obscurellus*, but the aedeagus is completely different (Fig. 28). The known distribution ranges from the Greek island Lesbos across southern Anatolia to Lebanon (Map 1). The species is herein reported from Turkey for the first time.

***Pseudomedon afghanicus* nov.sp. (Figs 29-31)**

**T y p e m a t e r i a l :** Holotype ♂: "J. Klapperich, Kandahar - Kuna, 950 m, 30.1.53, S-Afghanistan / Holotypus ♂ *Pseudomedon afghanicus* sp. n. det. V. Assing 2008" (NHMW).

**D e s c r i p t i o n :** Body length 3.3 mm. Coloration: forebody, including appendages, reddish-yellow; abdomen dark-brown, with the apex (posterior part of segment VII and segments VIII-X paler).

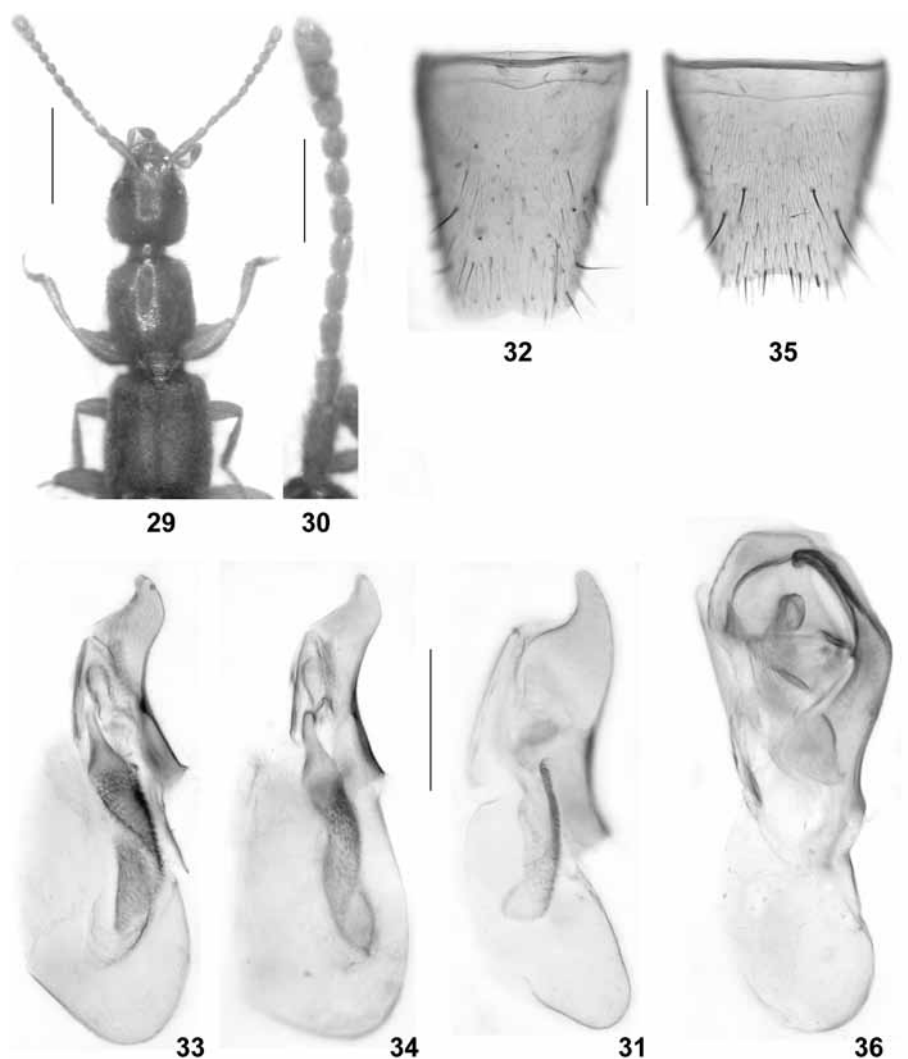
Head approximately 1.05 times as long as wide, not distinctly dilated posteriad; surface with fine and dense punctation. Eyes slightly more than half the length of postocular region in dorsal view (Fig. 29). Antennae approximately 0.9 mm long; antennomere III approximately as long as II; IV-V approximately 1.5 times as long as wide; VI-VII weakly oblong; VIII approximately as wide as long; IX-X weakly transverse (Fig. 30).

Pronotum 1.1 times as long as wide and 1.1 times as wide as head; surface with fine and dense punctation (similar to that of head) and without impunctate midline (Fig. 29).

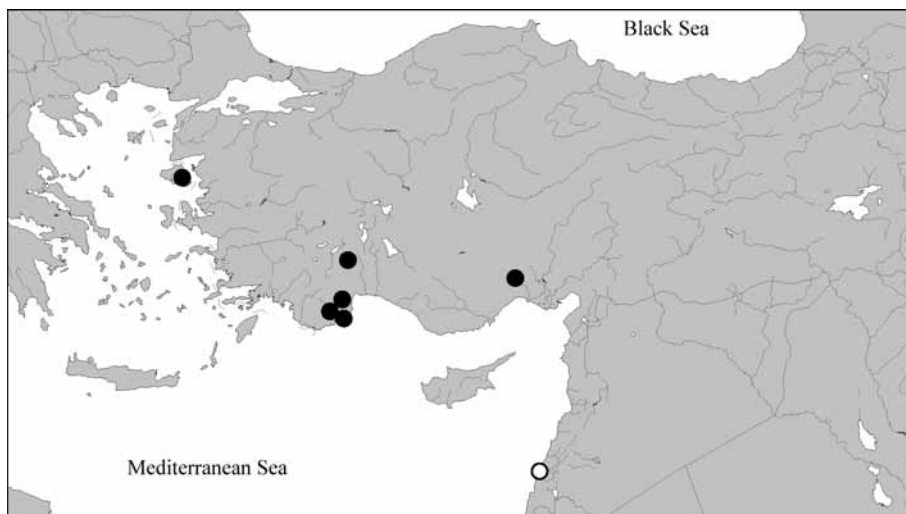
Elytra 1.2 times as wide and at suture approximately as long as pronotum; surface with very dense punctation and matt, with distinctly less luster than head and pronotum (Fig. 29).

Abdomen slightly narrower than elytra; punctation dense and distinct on anterior tergites (III-V), somewhat finer and sparse on posterior tergites.

♂: posterior margin of sternite VIII shallowly concave in the middle; aedeagus 0.33 mm long, ventral process conspicuously broad in lateral view (Fig. 31).



**Figs 29-36:** *Pseudomedon afghanicus* nov.sp. (29-31), *P. kazakhstanicus* nov.sp. (32-34), and *Luzea caucasica* (LUZE) (35-36): (29) forebody; (30) antenna; (31, 33-34, 36) aedeagus in lateral view; (32, 35): male sternite VIII. Scale bars: 29: 0.5 mm; 30, 32, 35: 0.2 mm; 31, 33-34, 36: 0.1 mm.



**Map 1:** Distribution of *Pseudomedon dido* (Saulcy). Filled circles: examined records; open circle: type locality.

**E t y m o l o g y :** The name (adjective) is derived from Afghanistan.

**C o m p a r a t i v e   n o t e s :** *Pseudomedon afghanicus* is readily separated from all its congeners by the distinctive shape of the aedeagus. In external appearance (coloration, size) the species resembles the Eastern Mediterranean *Pseudomedon dido* (SAULCY), from which it is additionally distinguished by the more slender body, particularly the more slender head (in *P. dido* wider than long), the much shorter antennae (*P. dido*: > 1.2 mm long; antennomeres IV-VI approximately twice as wide as long), and the much larger eyes. The species is also very similar to *Luzea caucasica*, with which the holotype was confounded in the collections at the NHMW and which was found in the same locality (see section 3.1.6). *Pseudomedon afghanicus* is distinguished from *L. caucasica* by the less densely punctured and more glossy head, the slightly longer antennae, the shorter elytra (in *L. caucasica* longer than the pronotum), by the much more oblong tergite and sternite VIII, and by the completely different morphology of the aedeagus.

**D i s t r i b u t i o n   a n d   b i o n o m i c s :** The type locality is situated near Kandahar in southern Afghanistan. The holotype was collected at an altitude of 950 m in January. Additional bionomic data are unknown.

***Pseudomedon kazakhstanicus* nov.sp.** (Figs 32-34)

**T y p e   m a t e r i a l :** Holotype ♂: "Kazakhstan, Ile riv., Karagach, 20.09.1986, V. Kastcheev / Holotypus ♂ *Pseudomedon kazakhstanicus* sp. n. det. V. Assing 2008 (cAss). Paratypes: 1 ♂, 1 ♀: same data as holotype (cAss); 1 ♂, 4 ♀: "Kazakhstan, Ile riv., Aidarly, 16.04.1983, V. Kastcheev" (cAss, cKas); 2 ♀: "Kazakhstan, Ile riv., Aidarly, 6.10.1983, V. Kastcheev" (cAss); 1 ♂: "Kazakhstan", Ile river, splav, 9B6, 30.VIII.1982, V. Kastcheev" (cAss).

**D e s c r i p t i o n :** Body length 3.0-3.6 mm. Coloration: whole body dark-yellowish. Other external characters as in *P. afghanicus* (see above).

♂: sternite VIII distinctly oblong, posterior margin shallowly concave in the middle (Fig.

32); aedeagus 0.33 mm long, ventral process apically of distinctive shape in lateral view (Figs 33-34).

**E t y m o l o g y :** The name (adjective) is derived from Kazakhstan.

**C o m p a r a t i v e n o t e s :** As can be inferred from the similar external characters, as well as from the similar shape of the male sternite VIII and the similar general morphology of the aedeagus, *P. kazakhstanicus* is closely related to *P. afghanicus*. From this species, it is reliably separated only by the shape of the ventral process of the aedeagus (distinctly more slender and shorter in *P. kazakhstanicus*) and the morphology of the internal membranous structures (longer in *P. kazakhstanicus*). The species may differ in the coloration, but more material is needed to verify that this character is constant. For characters separating *P. kazakhstanicus* from other *Pseudomedon* species, as well as from the similar and syntopic *Luzea caucasica* see the comparative notes below *P. afghanicus*.

**D i s t r i b u t i o n a n d b i o n o m i c s :** The species is known from three localities to the north and northeast of Almaty in southeastern Kazakhstan. On two occasions it was collected together with the externally similar *Luzea caucasica*.

### 3.1.6. *Luzea* BLACKWELDER 1952

#### *Luzea caucasica* (LUZE 1912) (Figs 35-36)

*Medon* (*Micromedon*) *causicus* LUZE 1912: 396.

**T y p e m a t e r i a l e x a m i n e d :** Lectotype ♂, present designation: "♀ [sic] / Caucasus / *Medon causicus* Luze / Type. Subg. *Micromedon* Luze / ex coll. Luze / ex coll. Scheerpeltz / Typus *Micromedon causicus* Luze / Lectotypus ♂ *Medon causicus* Luze, desig. V. Assing 2008 / *Luzea caucasica* (Luze) det. V. Assing 2008" (NHMW).

**A d d i t i o n a l m a t e r i a l e x a m i n e d :** Armenia: 1 ex., Verin Dzhrashen ["Aresch", 40°03'N, 44°30'E], leg. Schelkownikov (NHMW). Turkmenistan: 3 exs., Imambaba [36°45'N, 62°28'E] (NHMW, cAss); 3 exs., Repetek, V.1900, leg. Hauser (NHMW). Kazakhstan: 3 exs., Syrdarja region, Dzhuvek ["Dshulek"; 44°17'N, 66°26'E] env., Dzhuvén mt. ["Dshuvén-tjube"] (NHMW, cAss); 9 exs., Ile river, Karagach, 6.VII.1981, leg. Kastcheev (cAss, cKas); 1 ex., Ile river, splav, 9B6, 30.VIII.1982, leg. Kastcheev (cAss); 2 exs., Syrdaria river, Shaulder, 28.V.1985, leg. Kastcheev (cAss). Tajikistan: 1 ex., "Saramsakli" (NHMW). Afghanistan: 1 ex., Kabul env. (NHMW); 1 ex., Kabul, 1740 m, 21.VI.1953, leg. Klapperich (NHMW); 1 ex., Kandahar-Kuna, 950 m, 2.II.1953, leg. Klapperich (cAss).

**C o m m e n t :** The original description is based on several syntypes ("die Typen") from "Kaukasus (Näheres unbekannt)" (LUZE 1912). A male syntype was located in the collections of the NHMW; it is designated as the lectotype.

The male sternite VIII and the aedeagus are illustrated in Figs 35-36. This evidently widespread species is herein reported from Armenia, Kazakhstan, and Afghanistan for the first time.

### 3.1.7. *Hypomedon* MULSANT & REY 1878

#### *Hypomedon galilaeus* (BORDONI 1980)

**Material examined:** Israel: 2 exs., Galilee, Ginosar, 20.-21.V.1973, leg. Löbl (MHNG, cAss); 42 exs., Galilee, Hula, 25.IV.1982, leg. Besuchet & Löbl (MHNG, cAss, cFel); 1 ex., Galilee, Eilon, N Betzet, 22.IV.1982, leg. Besuchet & Löbl (MHNG); 1 ex., Galilee, Almagor, Jourdain, -200m, 26.IV.1982, leg. Besuchet & Löbl (MHNG); 11 exs., Dead Sea, 3 km S Natal Kalya, 1.VI.1973, leg. Löbl (MHNG, cAss); 2 exs., coast, Maagan Mikhael, 16.IV.1982, leg. Besuchet & Löbl (MHNG, cAss); 2 exs., Golan, Mahjar, -200m, 27.IV.1982, leg. Besuchet & Löbl (MHNG); 1 ex., Golan, Gilbon, 300m, 15.IV.1982, leg. Besuchet & Löbl (MHNG). Lebanon: 3 exs., Mazraat Nabi Kassem, 29.III.1975, leg. Besuchet (MHNG, cAss).

**Comment:** The species was previously known only from Israel and is herein newly reported from Lebanon. On some occasions it was collected together with the widespread and apparently parthenogenetic *H. debilicornis* (WOLLASTON).

### 3.1.8. *Platydome* GANGLBAUER 1895

#### *Platydome distinctiventris* (KOCH, 1939); nov.stat.

*Lathrobium* (*Platydome*) *sodale distinctiventre* KOCH 1939a: 165 ff.

**Type material examined:** Lectotype ♂, present designation: "Kručníenko / *Lathrobium distinctiventre* Koch, det. C. Koch / Type / Sammlung G. Paganetti / Holotype 1956 det. Kamp / Lectotypus ♂ *Lathrobium sodale distinctiventre* Koch, desig. V. Assing 2008 / *Platydome distinctiventris* (Koch), det. V. Assing 2008" (NHMB). Paralectotype ♂ [aedeagus missing]: "Krujcienko / Cotype / Sammlung G. Paganetti" (NHMB).

**Additional material examined:**

*P. distinctiventris*: Romania: 1♂, Munții Maramureș, Berdani, 5.5 km SSW Pop Ivan, Frumuseaua stream, 47°53'N, 24°18'E, 600 m, floated from sand and gravel of stream bank, 24.V.2003, leg. Makranczy (cAss); 1♀, Covasna, 3 km NE Comandău, Bâsca Mare stream, gravel bank in small gorge near Barta, 45°47'N, 26°18'E, 1070 m, floated from sand and gravel of stream bank, 18.V.2003, leg. Makranczy (cAss). Slovakia: 1♂: W-Tatra, Vavrišovo, bank of Belá river, 17.VI.1983, leg. Hieke (cSch). Slovakian or Polish territory: 1♂, "Beskiden", leg. Zoufal (NHMW). Locality not specified: 1♀, "Carpathen", leg. Brancsik (NHMW).

*P. sodalis* [see also ASSING 2003d]: Germany: 1♂, Bayern, locality not specified, 29.V.1885 (NHMW). Austria: Niederösterreich: 4♂♂, 7♀♀, Lunz, leg. Habermelner, Schuster (NHMW, cAss); 1♂, 3♀♀, Lunz, 1889, leg. Habermelner (NHMW, cAss); 8 exs., Lunz, 1895, leg. Birnbacher (NHMW); 4♂♂, 2♀♀, Lunz (NHMW, cSch). Oberösterreich: 1♂, Langbathbach, 22.VIII.1920, leg. Gschwendtner (cSch); 1♂, 1♀, Grünburg (NHMW). Steiermark: 2♀♀, Frein, bank of Mürz river, leg. Franz (NHMW). Kärnten: 2♀♀, Eisenkappel, 15.-29.VII.1923, leg. Scheerpeltz (NHMW); 1♂, Karawanken, 7.IX.1960, leg. Mandl (NHMW); 1♂, Karawanken, Ferlach, Tschepaschlucht, 15.VII.1924, leg. Scheerpeltz (NHMW); 1♀, Gailtal (NHMW). Slovenia: 2♂♂, Bohinj ["Wochein"], leg. Mocarski (NHMW, cAss).

**Comment:** The original description of *L. sodale distinctiventre* is based on two male syntypes from "Krujcienko, Dukajca". Both syntypes were located in the Frey collection at the NHMB; one of them is designated as the lectotype. The taxon has been treated as a subspecies since its original description, and has been recorded from Poland, Slovakia, and the Czech Republic (SMETANA 2004).

According to KOCH (1939a), *P. s. distinctiventris* is distinguished from the nominate subspecies by a slightly different morphology and chaetotaxy of the male sternite VIII



and by the slightly different shape of the ventral process of the aedeagus. An examination of the type specimens of both *P. distinctiventris* and of *P. sodalis* (see ASSING 2003d) confirmed the differences specified by KOCH (1939a). They are rather pronounced, constant, and clear-cut, and they evidently coincide with distinct distribution patterns, so that both taxa are regarded as distinct at the species level. The distribution of *P. distinctiventris* appears to be confined to the Carpathians.

### 3.1.9. *Tetartopeus* CZWALINA 1888

#### *Tetartopeus ciceronii* ZANETTI 1998, revalidated

*Tetartopeus ciceronii* ZANETTI 1998: 158 ff.

**Type material examined:** Paratypes: 1♂: "Lama (FO), m 712, 15/12/91, G. Campadelli / Paratypus / *Tetartopeus ciceronii* mihi, det. Zanetti 1997 / *Tetartopeus ciceronii* Zanetti det. V. Assing 2007" (cZan); 1♂: same data, but "30/XI/91" (cZan).

**Additional material examined:** Italy: 1 ex., Basilicata, Abentina Laurenzana natural reserve (PZ), 1150 m, 31.VII.1997, leg. Angelini (cZan); 4 exs., Basilicata, Abentina Laurenzana natural reserve (PZ), 11.X.1998, leg. Montemurro (cZan, cAss).

**Comment:** The original description of *T. ciceronii* is based on type material from various Italian localities, from Liguria in the north, to Calabria in the south (ZANETTI 1998). Having examined specimens from the type locality (Romagna: Passo Muraglione), BORDONI (2004) placed *T. ciceronii* in the synonymy of *T. rufonitidus* (REITTER 1909); this synonymy is given also in the recent Palaearctic catalogue (SMETANA 2004).

An examination of the illustrations, descriptions, and conclusions by BORDONI (2004) in the context of a study of several *Tetartopeus* species from central and southern Europe gave rise to the suspicion that the synonymy of *T. ciceronii* with *T. rufonitidus* was erroneous. A subsequent examination of types and additional specimens of *T. ciceronii*, which were kindly made available to me by Adriano Zanetti, eventually confirmed this suspicion, so that *T. ciceronii* is revalidated. In fact, the species is distinguished from *T. rufonitidus* by so many characters that it seems quite remarkable that a synonymy should have been seriously considered in the first place (Tab. 1). In general appearance, *T. ciceronii* bears a greater similarity to *T. terminatus* (GRAVENHORST) than to *T. rufonitidus*. Confirmed records of *T. rufonitidus* from Italy are unknown to me.

#### *Tetartopeus rufonitidus* (REITTER 1909)

**Material examined:** Russia: 1 ex., Tambovskaja oblast, Rasskasovo, 52°40'N, 41°49'E, 1.VI.1987, leg. Pütz (cPüt); 1 ex., same data, but light source, 28.VII.1987 (cPüt)

**Comment:** The above specimens represent the first record of this species from the Russian Central European territory.

**Tab. 1:** Characters distinguishing *Tetartopeus ciceronii* and *T. rufonitidus*

	<i>T. ciceronii</i>	<i>T. rufonitidus</i>
coloration	elytra near postero-lateral angles with yellowish spot distinctly contrasting with the blackish remainder of elytral surface (similar in this respect to <i>T. terminatus</i> ); legs more or less uniformly reddish to reddish-brown; antennomere I not infuscated, not distinctly darker than remainder of antennae	elytra in postero-lateral angles at most indistinctly paler than remainder of elytral surface; legs with the femora (and sometimes also the tibiae) often blackish-brown to blackish; antennomere I often infuscated and darker than antennomeres II-XI
punctuation	head with moderately fine punctuation; elytra with more or less well-defined and moderately coarse punctuation	head with very fine punctuation; elytra with shallower and finer punctuation
microsculpture	elytra with indistinct microsculpture; interstices rather shiny	elytra with fine but distinct microsculpture, almost matt
head shape	head broader, outline of posterior half of head almost semicircular (Fig. 10 in ZANETTI 1998)	head more slender, distinctly tapering behind eyes
elytral length	elytra at suture distinctly shorter than pronotum	elytra at suture at least as long as - usually clearly longer than - pronotum
aedeagus	length (from base of aedeagus to apex of ventral process): 1.6-1.7 mm; ventral process less slender and weakly angled in the middle (lateral view); dorsal plate larger and apically distinctly broader, apex either truncate, weakly convex, or weakly concave in the middle	length 1.4-1.5 mm; ventral process very slender and not angled in the middle (lateral view); dorsal plate smaller and apically distinctly narrower, apex strongly convex
♀ tergite VIII	posterior margin triangularly produced in the middle (Fig. 11 in ZANETTI 1998)	posterior margin more strongly and more acutely produced in the middle
♀ sternite VIII	posterior margin in the middle distinctly produced, more or less truncate in the middle (Fig. 12 in ZANETTI 1998)	posterior margin not distinctly produced in the middle, but broadly and weakly concave

***Tetartopeus paeneinsularum* BORDONI 1982***Tetartopeus paeneinsularum* BORDONI 1982b: 46.

**Material examined:** Italy: Trentino-Alto Adige: 6 exs., Coredò (TN), Laghi Palu, 21.IV.1987, leg. Zanetti (cZan, cAss). Lombardia: 4 exs., Endine (BG), P.te di Caria, 300 m, swamp, base of Salix, 18.I.1998, leg. Zanetti (cZan, cAss). Toscana: 1 ex., ca. 50 km W Firenze, Padule del Fucecchio, 16.VI.1992, leg. Assing (cAss). Basilicata: 1 ex., Laghi di Monticchio (PZ), Rionero in V. Atelia, Lago Grande, palude, 660 m, 19.IV.2003, leg. Zanetti (cZan); 5 exs., Oasi WWF "Lago Pantano di Pignola", 770 m, 29.V.1991, leg. Angelini (cAss).

**Sicilia:** 1 ex., Monti Nebrodi, Mistretta (ME), L. Quattrocchi, 1030 m, quercetum, 15.VI.1993, leg. Angelini (cSch); 1 ex., Monti Nebrodi, Mistretta, VI.1961 (cZan). **Spain:** 2 exs., Asturias, Playa de Concho de Artedo, 3 km W Cudillero, 43°34'N, 06°11'W, swamp behind dunes, 14.VI.2000, leg. Wrase (cSch, cAss). **Greece:** 3 exs., Pelopónnisos, W Nemea, lake Stymphalia, 37°51'N, 22°27'E, 620 m, arable land and lakeshore, 29.IV.2007, leg. Schnitter & Neumann (cApf, cAss).

**Comment:** The illustrations of the aedeagus provided in the original description (BORDONI 1982b) are highly misleading. For more accurate figures see BORDONI (2004). The species was previously known only from Italy and Spain (SMETANA 2004). The above new record from Greece suggests that *T. paeneinsularum* is much more widespread than currently known and that it has a holo-Mediterranean distribution.

### ***Tetartopeus scutellaris* (NORDMANN 1837)**

**Material examined:** **Bulgaria:** 1 ex., coast of Black Sea, Ropotamo National Park, 25.V.1988, leg. A. Pütz (cWun).

**Comment:** The known distribution of *T. scutellaris* extends from Russia, the Caucasus region, Turkey, and the Balkans in the east and southeast to eastern Central Europe (Austria, Czech Republic, Slovakia, Poland) in the west and northwest. The above specimen represents the first record from Bulgaria. According to SMETANA (2004), the vicariant species *T. angustatus* (LACORDAIRE 1835) occurs in Bulgaria. However, there is little doubt that this record is based on a confusion with the externally similar *T. scutellaris*. *Tetartopeus angustatus* has an Atlanto-Mediterranean distribution, which extends westwards into Central Europe. Previous records of this species from Poland and the Czech Republic are similarly doubtful.

### ***Tetartopeus sengleti* BORDONI 1984 (Figs 37-38)**

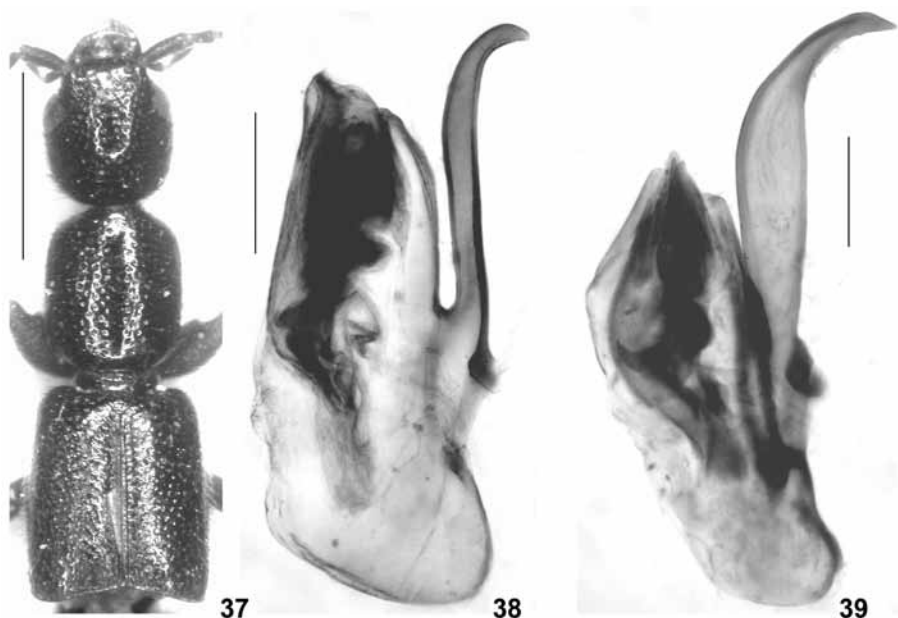
**Type material examined:** **Holotype** ♂: "Espagne Avila, Sierra de Gredos, Hoyo del Espino, 1300 m, 15-VIII-71, A. Senglet / Holotypus / *Tetartopeus sengleti* n. sp. Det. A. Bordoní 1979" (MHNG).

**Comment:** The original description is based on a single holotype male. The species has never been recorded again. The forebody and the aedeagus are illustrated in Figs 37-38.

### ***Tetartopeus persicus* COIFFAIT 1972 (Fig. 39)**

**Material examined:** **Iraq:** 1♂, Baghdad, "during floods, in seepage water around house", IV.1954, leg. Wiltshire (BMNH).

**Comment:** The species was previously known only from Iran. The above specimen represents the first record from Iraq; its aedeagus is illustrated in Fig. 39.



**Figs 37-39:** *Tetartopeus sengleti* BORDONI, holotype (37-38) and *T. persicus* COIFFAIT from Iraq (39): (37) forebody; (38-39) aedeagus in lateral view. Scale bars: 37: 1.0 mm; 38-39: 0.2 mm.

### 3.1.10. *Lobrathium* MULSANT & REY 1878

#### *Lobrathium multipunctum* (GRAVENHORST 1802)

*Lathrobium multistriatum* MOTSCHULSKY 1858: 646, preoccupied; **nov.syn.**

*Lathrobium differens* GEMMINGER & HAROLD 1868: 610, replacement name; **nov.syn.**

**C o m m e n t :** The original description of *L. multistriatum*, a preoccupied name subsequently replaced with the new name *L. differens* by GEMMINGER & HAROLD (1868), is based on an unspecified number of syntypes from "Styria". *Lathrobium differens* is a nomen dubium (SMETANA 2004) and doubtlessly does not refer to an overlooked species. The type material was not examined, but the description leaves little doubt that it refers to *L. multipunctum*: "un peu plus petit que le *L. spadiceum* Er. auquel il ressemble par ses formes et ses couleurs, mais étant plus convexe il présente des élytres régulièrement striées par des gros point imprimés. Epines caudale distinctes" (MOTSCHULSKY 1858). Consequently, both *Lathrobium multistriatum* MOTSCHULSKY and *L. differens* GEMMINGER & HAROLD are placed in the synonymy of *Lobrathium multipunctum* (GRAVENHORST).

***Lobrathium******reuteri* nov.sp.** (Figs 40-45, 48-52)

**Type material:** Holotype ♂: Iraq - SE Rawandoz, 36°30'N, 44°36'E, 1200-1400 m, pitfall, XI.2007-III.2008, leg. C. Reuter / Holotypus ♂ *Lobrathium reuteri* sp. n. det. V. Assing 2008 (cAss). Paratypes: 1 ♂, 1 ♀: same data as holotype (cFel, cAss).

**Description:** Body length 6.0-7.0 mm. Coloration: head and abdomen, except for the paler reddish-brown segments VIII-X, blackish-brown; pronotum brown to dark-brown; elytra weakly bicoloured, the anterior half brown and the posterior half reddish, the border between the anterior and the posterior area not clear-cut; legs and antennae pale reddish-brown.

**Habitus** as in Fig. 40. Head approximately as long as wide; punctation moderately coarse, dense in lateral and posterior areas and rather sparse in median dorsal area and on frons; interstices without microsculpture; lateral margins behind eyes smoothly convex in dorsal view, posterior angles not marked. Eyes approximately half the length of post-ocular region or slightly larger (Fig. 41).

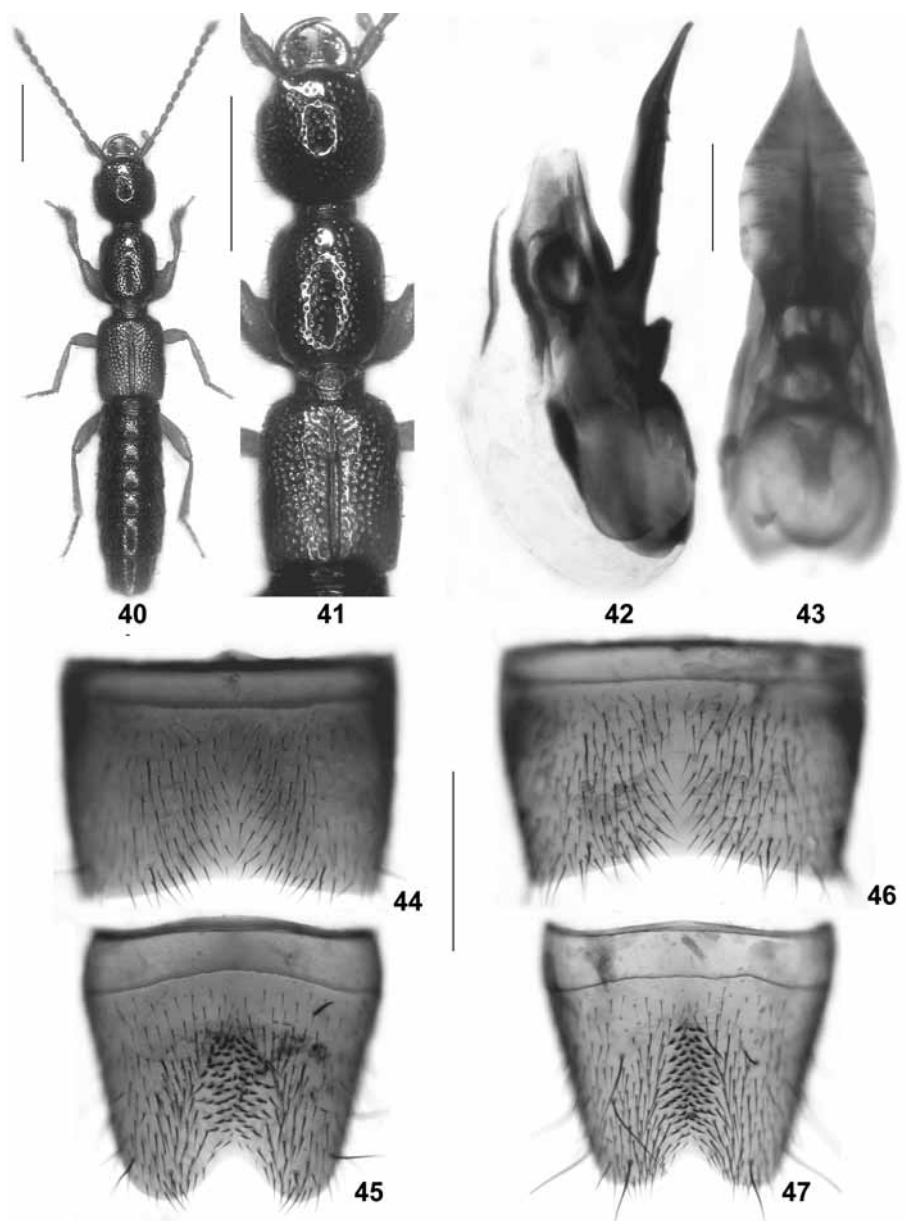
Pronotum approximately 1.25-1.30 times as long as wide and 0.9 times as wide as head; punctation slightly coarser than that of head. Elytra approximately 1.2 times as wide and at suture 0.90-0.95 times as long as pronotum; punctation denser and coarser than that of pronotum, not arranged in rows (Fig. 41). Hind wings present.

♂: sternite VII transverse, its posterior margin weakly convex, setae also present along midline (Fig. 44); tergite VIII with distinctly convex posterior margin; sternite VIII with rather broad and moderately deep posterior excision, in median area with a cluster of modified setae (Fig. 45); aedeagus as in Figs 42-43, 51-52.

♀: posterior margin of tergite VIII triangularly produced in the middle (Fig. 48); posterior margin of sternite VIII broadly convex (Fig. 49); segments IX-X as in Fig. 50.

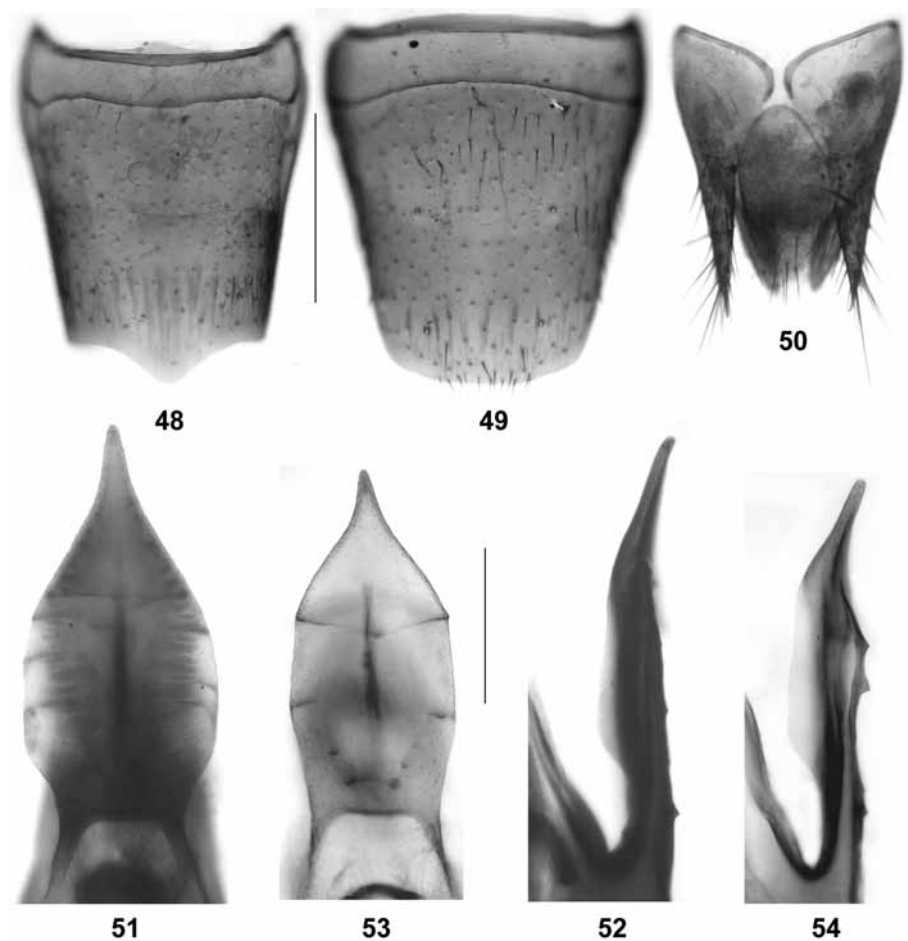
**Etymology:** The species is dedicated to the - admirably courageous - journalist Christoph Reuter, Hamburg, who collected the types in a currently rather unsafe region.

**Comparative notes:** Based on the primary and secondary sexual characters, *L. reuteri* is most closely related and most similar to *L. schillhammeri* ASSING & SCHÜLKE from southeastern Anatolia. It is distinguished from this species by the coloration of the elytra (in *L. schillhammeri* distinctly bicoloured, with the posterior third reddish-yellow, the border between the paler posterior and the blackish anterior area clear-cut), the shorter elytra (in *L. schillhammeri* approximately as long as pronotum or longer), the more irregular punctation of the elytra, the shape and chaetotaxy of the male sternite VII (in *L. schillhammeri* more transverse and with the posterior half of midline without setae), the shape and chaetotaxy of the male sternite VIII (in *L. schillhammeri* with less broad and shallower posterior excision and with a narrower median cluster of modified setae), the shape of the ventral process of the aedeagus both in lateral and in ventral view, and by the posteriorly more strongly produced female tergite VIII. From all other congeners, *L. reuteri* is readily distinguished by the distinctive shape of the aedeagus. For illustrations of *L. schillhammeri* and other Eastern Mediterranean *Lobrathium* species see Figs 46-47, 53-54, ASSING (2004a, 2005b, 2006a, 2007c), and ASSING & SCHÜLKE (2002), respectively.



**Figs 40-47:** *Lobrathium reuteri* nov.sp. (40-45) and *L. schillhammeri* ASSING & SCHÜLKE (46-47): (40) habitus; (41) forebody; (42-43) aedeagus in lateral and in ventral view; (44, 46) male sternite VII; (45, 47) male sternite VIII. Scale bars: 40-41: 1.0 mm; 44-47: 0.5 mm; 42-43: 0.2 mm.

**Distribution and bionomics:** The type locality is situated in the area to the southeast of Rawandoz, northeastern Iraq. The specimens were collected with pitfall traps on a slope along a temporary stream with oak trees and grassland at an altitude of 1200-1400 m.



**Figs 48-54:** *Lobrathium reuteri* nov.sp. (48-52) and *L. schillhammeri* ASSING & SCHÜLKE (53-54); (48) female tergite VIII; (49) female sternite VIII; (50) female segments IX-X; (51-54) ventral process of aedeagus in ventral and in lateral view. Scale bars: 48-50: 0.5 mm; 51-54: 0.2 mm.

### 3.1.11. *Lathrobium* GRAVENHORST 1802

#### *Lathrobium spadiceum* ERICHSON 1840

*Lathrobium spadiceum* ERICHSON 1840: 592 f.

*Lathrobium tarnieri* ROUGET 1854: 83; synonymy confirmed.

Type material examined:

*L. spadiceum*: Lectotype ♂, present designation: "6330 / spadiceum Er., Austr. alp. Schüpp. / Syntypus *Lathrobium spadiceum* Erichson, 1840, labelled by MNHUB 2008 / Lectotypus ♂ *Lathrobium spadiceum* Erichson desig. V. Assing 2008 / *Lathrobium spadiceum* Erichson det. V. Assing 2008" (MNHUB). Paralectotypes: 1 ♂, 2 ♀ [1 ♀ without head]: "Hist.-Coll. (Coleoptera), Nr. 6330, *Lathrobium spadiceum* Erichson, 1840, Austr. alpin., Schüpp., Zool. Mus. Berlin / Syntypus *Lathrobium spadiceum* Erichson, 1840, labelled by MNHUB 2008" (MNHUB); 1 ♂: "Bavar. alp. / Walzl / spadiceum Er., Tarnieri Rouget / coll. Kraatz / coll. DEI Müncheberg" (DEI).

*L. tarnieri*: Syntype ♀: "3068 / Tarnieri Roug., Dijon, Tarnier / Gallia mer. (Colombel / D.E.I. coll. von Heyden / *Lathrobium spadiceum* Er., Tarnieri Rouget / coll. DEI Müncheberg / *Lathrobium spadiceum* Erichson det. V. Assing 2008" (DEI).

Additional material examined: France: 1 ♀, Rhône-Alpes, Isère, Entre-deux-Guiers, 29.IV.1914, leg. Planet (MHNG). Germany: 1 ♀, Nordrhein-Westfalen, Jülich, leg. Eichhoff (DEI); 1 ♂, "Rhein", leg. Eichhoff (DEI). Switzerland: 1 ♀, Aarau (DEI). Austria: 1 ♂, 1 ♀, Niederösterreich, Donauauen (NHMW, cAss). Czech Republic: 1 ♀, Paskov, leg. Graf (DEI); 1 ♂, Brandýs n. L. (NHMW).

Comment: The type series of *L. spadiceum* was collected "in Austriae alpinus, Dom. Schüppel, in Bavaria meridionali, Dom. Walzl" (ERICHSON 1840). Four syntypes, two males and two females, from Austria were located in the historical collection of the MNHUB, a male syntype from Bavaria was found in the collections of the DEI. One of the males from Austria is designated as the lectotype.

The original description of *L. tarnieri* is based on an unspecified number of syntypes collected by F. Tarnier "à l'est de Dijon" and "un certain nombre d'exemplaires" collected by Rouget (probably also in the environs of Dijon) (ROUGET 1854). The female syntype of *L. tarnieri* from Dijon in the collections of the DEI is conspecific with the holotype of *L. spadiceum*, so that the previously established synonymy is confirmed.

#### *Lathrobium longulum* GRAVENHORST 1802

*Lathrobium scybalarium* GISTEL 1857: 14 f.; **nov.syn.**

*Lathrobium longulum luzari* KOCH 1937: 257; **nov.syn.**

Type material examined: see ASSING (1995).

Comment: The nomen dubium *L. scybalarium* was described from an unspecified number of syntypes from "ad fluvios Styriae" (GISTEL 1857). According to the description, which comprises only two text lines, the species is completely black, except for the paler tarsi, and "2 lin." (i. e. approximately 4.5 mm) long. The only *Lathrobium* species occurring in Austria and matching this description is *L. longulum*, with which *L. scybalarium* is synonymised.

According to the original description of *Lathrobium longulum luzari*, which is based on an unspecified number of syntypes from "Eskischehir (As. minor)", the species is characterised by an apically hook-shaped ventral process of the aedeagus, whereas in the nominal subspecies, the ventral process is shorter and not distinctly hook-shaped (KOCH 1937). However, Koch's illustration and understanding of the shape of the aedeagus of *L.*



*longulum longulum* is clearly based on an artefact. The normal shape of the ventral process of the aedeagus is hook-shaped, exactly like the one figured for *L. longulum luzari* by KOCH (1937). For an illustration of the aedeagus of the lectotype of *L. longulum* see ASSING (1995). Consequently, *L. longulum luzari* KOCH is placed in the synonymy of *L. longulum* GRAVENHORST.

### ***Lathrobium laevipenne* HEER 1839**

*Lathrobium elytrale* GISTEL 1857: 86; **nov.syn.**

**C o m m e n t :** The original description of the nomen dubium *L. elytrale*, which is based on an unspecified number of - presumably lost - syntypes from "Bavaria" (GISTEL 1857), best fits *L. laevipenne* HEER: "nigrum,... elytris totis rufescentibus;... elytris pronoto longioribus,... Long. 3 3/4''". Hence the synonymy proposed above.

### ***Lathrobium brunnipes* (FABRICIUS 1793)**

*Lathrobium fuscum* GRAVENHORST 1806: 130 f.; **nov.syn.**

**T y p e m a t e r i a l :** *L. fuscum*: Neotype ♂, present designation: "W. Germany, Umg. Hannover, Bokeloh-Kaliberg, 10.4.83 / Neotypus ♂ *Lathrobium fuscum* Gravenhorst, desig. V. Assing 2008 / *Lathrobium brunnipes* (Fabricius) ♂, det. V. Assing 2003" (MNHUB).

**C o m m e n t :** The original description of the nomen dubium *L. fuscum* is based on an unspecified number of syntypes from Paris and Braunschweig collected by Brongniart and Dahl, respectively (GRAVENHORST 1806). The type material was found neither in the historical collection at the MNHUB (WILLERS, e-mail 20 Feb., 2008) nor in the collections of the MNHNP (TAGHAVIAN, e-mail 18 June, 2008), so that it can be assumed to be lost. There is no reasonable doubt that it is conspecific with a described species whose name has been in use for decades, if not centuries, so that a synonymisation with a senior name seems advisable. According to the original description, the type specimens are of dark-brown coloration, similar in habitus to *L. brunnipes*, but distinguished by finer punctation, and their elytra are barely longer than wide and approximately as long and as wide as the pronotum. This description fits the brachypterous morph of *L. brunnipes*, which is more finely punctate (particularly on the head and the elytra) than most other *Lathrobium* species occurring in France and Germany. Also, the punctation of the fore-body is subject to some intraspecific variation in the genus. Therefore, a relatively pale coloured (blackish-brown), finely punctate, and brachypterous specimen of *L. brunnipes* from Niedersachsen is designated as the neotype of *L. fuscum* and the above synonymy is established.

### ***Lathrobium taxi* BERNHAUER 1902**

**M a t e r i a l e x a m i n e d :** Russia: 1 ex., Tulskaia oblast, Jefremov, 53°09'N, 38°07'E, 7.-13.IV.1986, leg. Pütz (cPüt); 1 ex., same data, but 9.V.1986 (cPüt); 1 ex., Tulskaia obl., Galitsa env., NW Jefremov, 53°09'N, 37°59'E, 12.IV.1986, leg. Pütz (cAss); 1 ex., same data, but 25.V.1986 (cAss)..

**C o m m e n t :** The above specimens represent the first records from Russia (SMETANA 2004).

***Lathrobium flavipes* HOCHHUTH 1851**

**Material examined:** Russia: 9 exs., Tambovskaya oblast, Rasskasovo, 52°40'N, 41°49'E, light source, 28.VII.1987, leg. Pütz (cPüt, cAss); 7 exs., same data, but 30.VII.1987 (cPüt, cAss).

**Comment:** The coloration of the elytra is remarkably variable in this species, ranging from distinctly bicoloured, with the anterior 2/3 black and the posterior 1/3 reddish-yellow, to uniformly black (with transitional conditions). In the bicoloured specimens, the legs are reddish, whereas in dark-coloured beetles they are blackish-brown. The above specimens represent the first records from the Russian Central European territory (SMETANA 2004).

***Lathrobium fovulum* STEPHENS 1833**

**Comment:** The species is erroneously listed for the Canary Islands by SMETANA (2004).

***Lathrobium pallidum* NORDMANN 1837**

*Lathrobium krniense* JOSEPH 1868: 365 f.; **nov.syn.**

**Comment:** The original description of this nomen dubium is based on two syntypes from Krn mountain, Juliske Alpy, Slovenia. *Lathrobium krniense* is the sole and type species of the subgenus *Centrocnemiella* STRAND 1934, a replacement name for the preoccupied homonym *Centrocnemis* JOSEPH 1868. According to HORN et al. (1990), the Joseph collection was separated and the whereabouts of large parts of this collection are unknown. Enquiries directed to various major European natural history museums yielded no clues whatsoever as to whether the type material of *L. krniense* still exists or where it may be found.

According to JOSEPH (1868), the holotype is winged, so that it can be safely assumed that it does not represent an endemic species of the Juliske Alpy. If *L. krniense* is a species of *Lathrobium*, the details provided in the original description best fit a macropterous *L. pallidum*, a widespread dimorphic species with which the type material of *L. krniense* is hypothesised to be conspecific.

Thus the following synonymies result: *Lathrobium* GRAVENHORST 1802 = *Centrocnemis* Joseph 1868, = *Centrocnemiella* STRAND 1934, **nov.syn.**; *Lathrobium pallidum* NORDMANN 1837 = *Lathrobium krniense* JOSEPH 1868, **nov.syn.**

***Lathrobium vitalyi* nov.sp. (Figs 48-52)**

**Type material:** Holotype ♂: "Kazakhstan, Aksu-Djabagly, Djabagly riv., Kshi-Kaindy, 30.06.1983, V. Kastcheev / Holotypus ♂ *Lathrobium vitalyi* sp. n. det. V. Assing 2008" (cAss).

**Description:** Body length 7.5 mm. Coloration: head brown; pronotum and elytra reddish; abdomen blackish-brown with slightly paler apex; legs reddish; antennae dark-reddish.

Head almost as wide as long (1.03 times as long as wide); punctation distinct, but not very coarse, moderately sparse; interstices in lateral dorsal areas approximately twice as wide as diameter of punctures, in median dorsal area even wider; surface with distinct, but shallow microsculpture composed of isodiametric meshes. Eyes weakly convex, small, approximately 1/4 the length of postocular region in dorsal view (Fig. 55).

Pronotum 1.35 times as long as wide and 0.92 times as wide as head; punctuation slightly coarser than that of head; interstices on average approximately 1.5 times as wide as diameter of punctures; microsculpture absent (Fig. 55).

Elytra approximately 1.1 times as wide and at suture 0.57 times as long as pronotum, distinctly dilated posteriad (i. e. of trapezoid shape); punctuation finer, shallower, and less defined than that of pronotum (Fig. 55). Hind wings reduced.

Abdomen widest at segment VI, slightly broader than elytra; punctuation fine, rather dense, and well-defined; microsculpture present, but very shallow; posterior margin of tergite VII without palisade fringe.

♂: sternite VII transverse, with triangular median impression in posterior half, this impression furnished with black modified setae, posterior margin moderately concave in the middle (Fig. 56); sternite VIII shaped as in Fig. 57, in the middle with cluster of black modified setae, posterior margin in the middle with small and broadly V-shaped excision; aedeagus distinctive, with slender and, in ventral view, asymmetric ventral process (Figs 58-59).

♀: unknown.

**E t y m o l o g y :** The species is dedicated to Vitaly Kastcheev, who collected the holotype and to whom I am most grateful for the generous gift of the holotype.

**C o m p a r a t i v e   n o t e s :** *Lathrobium vitei* is readily distinguished from all its congeners by the characteristic shape of the aedeagus, in particular the shape of the ventral process, and the modifications of the male sternites VII and VIII. From other congeners recorded from Middle Asia and with similarly short elytra and reduced hind wings, it is additionally separated as follows:

from *L. bucharens* KOCH 1944 (Uzbekistan) by the different head shape (in *L. bucharens* oval with almost obsolete posterior angles) and the reddish pronotum (in *L. bucharens* blackish);

from *L. caspicum* KOCH, 1938 (Azerbaijan, Iran) by the uniform coloration of the elytra (in *L. caspicum* bicoloured, with the anterior half black and the posterior half reddish) and by the elytral punctuation (in *L. caspicum* coarser and arranged in rows);

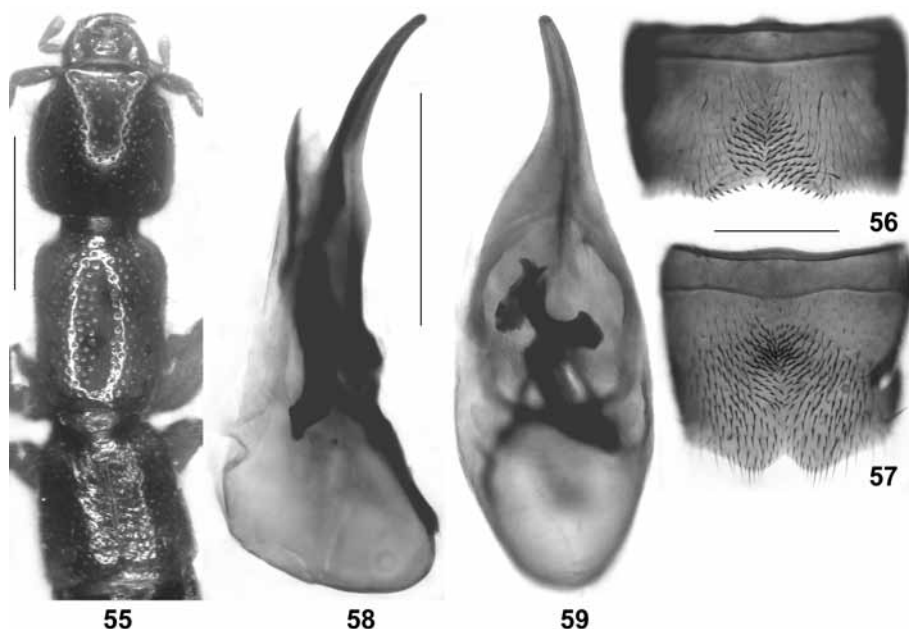
from *L. concolor* MOTSCHULSKY 1860 (Uzbekistan, Mongolia, Russian Far East) by darker head and abdomen, as well as by its smaller size;

from *L. kuntzeni* KOCH 1939 (Uzbekistan, Iran) by the different coloration (*L. kuntzeni*: pronotum black with blueish hue, apex of abdomen reddish) and much smaller eyes;

from *L. marani* KOCH 1939 by its smaller size, a reddish pronotum (in *L. marani* black), smaller eyes, and shorter elytra;

from *L. semirufulum* BERNHAUER 1902 by its larger size (*L. semirufulum*: approximately 5 mm).

For illustrations of the genitalia of the above species see COIFFAIT (1982), KOCH (1938, 1939a, 1939b, 1944), and WÜSTHOFF (1942).



**Figs 55-59:** *Lathrobium vitalyi* nov.sp.: (55) forebody; (56) male sternite VII; (57) male sternite VIII; (58-59) aedeagus in lateral and in ventral view. Scale bars: 55: 1.0 mm; 56-59: 0.5 mm.

**Distribution and bionomics:** The type locality is situated in southern Kazakhstan, in the region to the northeast of Tashkent. The holotype was collected in June. Additional bionomic data are not available.

### 3.1.12. *Pseudolathra* CASEY 1905

#### *Pseudolathra araxidis* COIFFAIT 1972

**Material examined:** Kazakhstan: 1♂, 5♀♀, Syrdaria river, Shaulder, 28.V.1985, leg. Kastcheev (cAss).

**Comment:** *Pseudolathra araxidis*, whose original description is based on a female, had previously been recorded only from the type locality in Armenia. The above specimens closely agree with the details of the original description, but, until males from the type locality or its vicinity become available, the identification is still tentative. The above specimens represent the first record of this species from Kazakhstan.

### 3.1.13. *Ochtheophilum* STEPHENS 1829

#### *Ochtheophilum fracticorne* (PAYKULL 1800)

*Cryptobium pallidum* GISTEL 1857: 84; **nov.syn.**

**C o m m e n t :** The original description of the nomen dubium *Cryptobium pallidum* is based on an unspecified number of - presumably lost - syntypes from "Helvetia" (GISTEL 1857). The type material is evidently teneral ("totum pallidum"). The description does not provide any evidence whatsoever that it should be distinct from *O. fracticorne*, the most common species of the genus in Central Europe. Hence the synonymy proposed above.

#### *Ochtheophilum turkestanicum* (KORGE 1968)

**M a t e r i a l   e x a m i n e d :** **Turkey:** 2♂♂, Muğla, SE Köyceğiz, 36°57'N, 28°44'E, 10 m, floodplain forest, 28.III.2002, leg. Assing (cAss); 1♂, Antalya, Side, V.-VI.1989, leg. Rydh (cAss); 1♂, Antalya, Saklikent, 18.III.2002, leg. Esser (cAss); 1♂, Mersin, NW Silifke, Mut-Ermenek, 36°38'N, 33°01'E, 1030 m, 20.IV.2005, leg. Brachat & Meybohm (cAss); 1♂, 2 exs., Antakya, 7 km E Yeşilkent, 350-400m, 4.V.1978, leg. Besuchet & Löbl (MHNG, cAss); 20 exs., Kayseri, Sultansazlığı, 1000 m, 6.V.1978, leg. Besuchet & Löbl (MHNG, cAss). **Cyprus:** see ASSING & WUNDERLE (2001). **Israel:** 3♂♂, coast, N Naaman, Akko, 18.IV.1982, leg. Besuchet & Löbl (MHNG, cAss); 2♂♂, 2 exs. [det. Feldmann], Haifa district, coastal area, 3 km W Zikhren Ja'akov, near fishponds with brackish water, 3.V.2006, leg. Wrase (cSch); 1♂♂, 4 exs. [det. Feldmann], S Hadera, Dreikhat Ya'ar, 32°25'N, 34°54'E, 10 m, ponds and wet meadows, leg. Aßmann (cFel). **Iran:** see ASSING (2007d). **Kazakhstan:** 5♂♂, 3♀♀, Ile river, Aidarly, 12.IV.1984, leg. Kastcheev (cAss); 1♂, 2♀♀, Ile river, Karagach, 20.IX.1986, leg. Kastcheev (cAss, cKas); 3♀♀, Ile river, splav, 29.VIII.1982, leg. Kastcheev (cAss); 1 ex., Syrdaria river, Djetyysai, 5.V.1980, leg. Kastcheev (cAss).

**C o m m e n t :** The species is widespread in the Eastern Mediterranean, the Caucasus region, and in Middle Asia. It is herein newly reported from Kazakhstan.

### 3.1.14. Doubtful names excluded from the Paederinae

#### *Lordithon lunulatus* (LINNAEUS 1760)

*Staphylinus austriacus* SCHRANK 1781: 237 f.; **nov.syn.**

*Paederus austriacus*: SCHRANK (1798: 653).

**C o m m e n t :** In the recent Palaearctic catalogue (SMETANA 2004), *Staphylinus austriacus* SCHRANK is listed as a nomen dubium in the genus *Paederus* FABRICIUS. The whereabouts of the Schrank collection is not indicated by HORN et al. (1990) and GAEDIKE (1995), suggesting that it is lost. The original description, which is based on an unspecified number of syntypes from "Viennae", is - as was usual at the time - very short and mainly focuses on the coloration ("Staphylinus niger; pedibus, abdominisque basi testaceis; elytris fuscis"... "Lucide testacei, seu potius cerei coloris sunt antennarum bases, pedes, abdominis basis, & pectus. Elytra fusca, seu obscure testacea. Reliqua nigra") and the size ("Longit. a cap. ad an. elytri 2 lin. 1/2") (SCHRANK 1781). In a later work, SCHRANK (1798) stated that species lived "unter Blätterpilzen", that the pronotum was "fast tellerförmig", and the size was only "2 1/4". Based on these data, the name does not refer to a species of *Paederus*, nor to any other genus of Paederinae, but apparently to a mycetophilous species of Tachyporinae. The species that seems to fit the description best is *Lordithon lunulatus* (LINNAEUS 1760), with which *S. austriacus* is synonymised.

***Platystethus arenarius* (GEOFFROY 1785)***Paederus verbasci* SCHRANK 1798: 653; **nov.syn.**

**C o m m e n t :** *Paederus verbasci* SCHRANK, too, is listed as a nomen dubium in the genus *Paederus* by SMETANA (2004). The original description is contained in a work on Bavarian animals and based on an unspecified number of syntypes. The details indicated in this description ("sattschwarz; der Rückenschild halbkugelförmig; das letzte Glied der vordern Fressspitzen fadenförmig, das vorletzte keulenförmig.... unter den Blättern des Wollkrautes.... Lang 1 1/4. Die Flügeldecken gerundet, wie bey den Oelkäfern, vielleicht flügellos.... am letzten Ringe des Hinterleibes... einen Haarbüschel beiderseits") (SCHRANK 1798), are not easily interpreted. The name clearly does not refer to a species of *Paederus*, but possibly one of Omaliinae, Oxytelinae, Steninae, Tachyporinae, or Aleocharinae (*Aleochara*, *Autalia*), if it refers to a species of Staphylinidae at all. The only older name fairly in agreement with the description is that of *Platystethus arenarius*, with which *P. verbasci* is formally synonymised.

***Cordalia obscura* (GRAVENHORST 1802)***Paederus clavicornis* LENTZ 1856: 9; **nov.syn.**

**C o m m e n t :** The Lentz collection was deposited in the Zoological Museum Kalinin-grad, large parts of which were destroyed during World War II (HORN et al. 1990), so that the type material of *P. clavicornis* is presumably lost. According to the original description of this nomen dubium, the species is similar to *Drusilla canaliculata* (FABRICIUS), but much smaller. The morphological details provided ("rufo-fuscus, capite abdominisque apice nigris, pedibus pallidis,... Das Brustschild fast kugelig, auf der Mitte ein Eindruck") suggest that the type material may be conspecific with *Cordalia obscura*. Hence the above synonymy.

**3.2. Xantholinini****3.2.1. *Stenistoderus* JACQUELIN DU VAL 1856*****Stenistoderus cephalotes* (KRAATZ 1858)**

**M a t e r i a l e x a m i n e d :** Cyprus: 1 ex., Korfi, Limnatis river, 350 m, 11.III.1996, leg. Frisch (MNHUB).

**C o m m e n t :** The above specimen represents the first record from Cyprus. For additional records see ASSING (2007a).

**3.2.2. *Gyrophypnus* LEACH 1819**

In the context of a recent revision of the Western Palaearctic *Gyrophypnus* species, some new synonymies were introduced and few new species described (ASSING 2003c). Subsequently, BORDONI (2005) published a - partly rather polemic - note, which is evidently not based on scientific motivation and argumentation. Representative of the line of reasoning is the following statement, which requires no further comment:

"If, on the one hand, examination of the abundant material can help better define distribution of the

species, on the other there is the risk of complicating rather than simplifying the information we already have on the genus..." (BORDONI 2005: 103).

In this note, BORDONI synonymises all the species described in the preceding revision and revalidates a synonymised name made available by himself, without so much as studying type material or non-type material from the vicinity of the type localities and, consequently, without meeting even basic scientific requirements. The synonymies and revalidation were repeated by BORDONI (2007c), ignoring the fact that one of the names had been revalidated in the meantime (ASSING 2006b).

As far as the status of *G. libanoticus* BORDONI 1984 is concerned, the reasoning in ASSING (2003c), which is based on an examination of the type material, is referred to. The characters pointed out by BORDONI (2005) are within the range of intraspecific variation of *G. fracticornis*, a widespread cosmopolitan species. Remarkably, he maintains that the distribution of *G. libanoticus* should be confined to high-altitude habitats in Lebanon, although the type material does not show any of the usual adaptations to high-altitude habitats (e. g. reduction of wings and eyes), although there is no other example of a mountain endemic in the whole genus, and although, in his introduction, BORDONI (2005: 103) states that "almost all of them [i. e., the *Gyrophypnus* species] have a wide distribution that obviously leads to a high degree of variability". *Gyrophypnus fracticornis* is common in the Middle East and, based on the evidence available and an examination of the types, there can be no doubt that the type material of *G. libanoticus* is conspecific with this species.

According to BORDONI (2005), "there is no doubt that" *G. wutaishanensis* BORDONI 2000 from China and *G. schuelkei* ASSING 2003 from the Russian Far East "are the same species". However, according to the figures in BORDONI (2000), the parameres of *G. wutaishanensis* are spinose on the external face and approximately half as long as the aedeagus, whereas in *G. schuelkei* they are spinose on the internal face and approximately one fourth as long as the aedeagus. Also, there are differences in the chaetotaxy of the parameres (see figures 31 and 36 in BORDONI (2000) and ASSING (2003c), respectively). An important diagnostic character for the separation of *Gyrophypnus* species is the absolute size of the aedeagus. However, nothing can be said about size differences, because BORDONI neither states the size in the description, nor does he provide a scale with his drawings.

Another synonymy proposed by BORDONI (2005) is that of *G. vomer* ASSING 2003 with *G. sichuanensis* ZHENG 1995. However, based on the figures provided by BORDONI (2000) for *G. sichuanensis*, the aedeagus is distally of different shape and the parameres are relatively smaller and more slender than in *G. vomer*; also, the chaetotaxy of the parameres is different. Again, nothing can be said about absolute size, as BORDONI (2000) provides no scale with the drawings. As regards the taxonomic status of *G. liber* ASSING 2003, the line of reasoning in ASSING (2003c, 2006b) is referred to.

In conclusion, the taxonomic changes proposed by BORDONI (2005) are, without an examination of type material, not plausible for the reasons outlined above, so that these changes are formally reversed. *Gyrophypnus libanoticus* BORDONI is again placed in the synonymy of *G. fracticornis* (MÜLLER 1776) and *G. vomer*, *G. schuelkei*, and *G. liber* are revalidated.

### 3.2.3. *Zeteotomus* JACQUELIN DU VAL 1856

#### *Zeteotomus brevicornis* (ERICHSON 1839)

*Metoponcus brevicornis cephalenicus* BORDONI 1983: 522; **nov.syn.**

Type material examined: Holotype ♂: "Kephallinia, Ainos, 1000 m, 31-III-1971, I. Lobl [sic] / Holotypus / *Zeteotomus brevicornis cephalenicus*, Det. A. Bordonì 1975 / *Zeteotomus brevicornis* (Erichson) det. V. Assing 2008" (MHNG). Paratype ♀: same data as holotype (MHNG).

Comment: According to the original description of *Z. brevicornis cephalenicus*, which is based on three type specimens from the Greek island Kephallinia, the subspecies is distinguished from the nominate subspecies by greater size, the blackish coloration of the head and pronotum, and a more slender aedeagus with long parameres (BORDONI 1983). *Zeteotomus brevicornis* was originally described from "Austria" (ERICHSON 1839b). An examination of the holotype and a paratype of *Z. b. cephalenicus*, however, revealed that they are - in every respect - typical examples of *Z. brevicornis*: their coloration is similar to - not darker than - material of *Z. brevicornis* from Central Europe, their size is within - not even at the upper end of - the range of variation of this species, and the aedeagus is of the same shape as in specimens from other parts of the distribution of *Z. brevicornis*. (It appears that BORDONI (1983) may have had unusually pale-coloured and small specimens of *Z. brevicornis* for comparison.) In addition, based on the faunistic data available, *Z. brevicornis* is a ponto-Mediterranean species, so that the presence of a distinct subspecies in Kephallinia or in southern Greece would not seem plausible from a zoogeographic point of view. In consequence, *Z. b. cephalenicus* is placed in synonymy with *Z. brevicornis*.

### 3.2.4. *Gauropterus* THOMSON 1860

#### *Gauropterus fulgidus* (FABRICIUS 1787)

*Gauropterus fulgidus pseudosanguinipes* COIFFAIT 1964: 504; **nov.syn.**

Comment: *Gauropterus fulgidus pseudosanguinipes* was originally described from three males from southern Algeria (COIFFAIT 1964) and subsequently reported also from Morocco (COIFFAIT 1972). According to COIFFAIT (1964, 1972), the subspecies is identical to the nominal subspecies in the male genitalia, but distinguished by the rufous legs and antennae.

In a recently collected sample of *G. fulgidus* from Morocco, both morphs were represented, one with rufous legs, antennae, and elytra, and the other of the usual coloration, suggesting that what COIFFAIT (1964) described as *G. f. pseudosanguinipes* is nothing but a colour morph of *G. fulgidus*. Hence the subspecific status is no longer justifiable and *P. f. pseudosanguinipes* is placed in synonymy with *G. fulgidus*.

### 3.2.5. *Xantholinus* DEJEAN 1821

#### *Xantholinus (Xantholinus) longiventris* HEER 1839

*Xantholinus humidicola* GISTEL 1857: 25; **nov.syn.**

*Xantholinus gastraeus* GISTEL 1857: 60; **nov.syn.**



**C o m m e n t :** The original description of the nomen dubium *Xantholinus humidicola* is based on an unspecified number of - presumably lost - syntypes from "loca umbrosa humosa alpium Styriae" (GISTEL 1857). The extremely short and vague description may be referred to any black species of *Xantholinus* or *Gyrohypnus*. The most common species in damp and shady biotopes of the Alps are *X. longiventris* and *X. linearis*; the former is chosen as the senior synonym.

According to the original description of *Xantholinus gastraeus*, which is based on type material from "Helvetiae montes", the species is black with reddish legs and antennae, glossy, and "3 1/2'''' long. It best agrees with *X. longiventris*, with which *X. gastraeus* is synonymised.

### **On the subgenus *Meneidophallus* BORDONI 1999**

The subgeneric name *Meneidophallus* was first used by BORDONI (1972) to include seven Western Palaearctic species, but remained unavailable until BORDONI (1999) designated *Xantholinus roubali* COIFFAIT 1956 as the type species. GUSAROV (2002) showed that the internal structures of the aedeagus of *X. dvoraki* COIFFAIT 1956 are highly variable and placed *X. roubali* in synonymy with this name, along with several other names previously attributed to *Meneidophallus*. Another synonym was added by BORDONI (2007a). *Xantholinus dvoraki* and its synonyms were attributed to the subgenus *Xantholinus* by LOHSE (1964) and COIFFAIT (1972).

According to BORDONI (1972), the key character separating *Meneidophallus* from other subgenera is the long internal tube of the aedeagus. A comparative study of the male genitalia of various Western Palaearctic *Xantholinus* species revealed that there is no convincing evidence that *X. dvoraki* should not be considered a representative of the subgenus *Xantholinus*. True, the distal part of the aedeagus is of slightly different shape, the internal tube is longer, and the spines are shaped differently. However, these differences are clearly autapomorphic, an expression of normal intrasubgeneric variation, and do not justify a separation on the subgeneric level. The general arrangement of the spines, the general morphology of the internal tube, and the external characters are similar. An additional argument supporting the placement of *X. dvoraki* in the subgenus *Xantholinus* is the similar ecology (a preference for unforested lowland habitats). Therefore, *X. dvoraki* is moved back to *Xantholinus* s. str., resulting in the following synonymy: *Xantholinus* DEJEAN 1821 = *Meneidophallus* BORDONI 1999, nov.syn.

### ***Xantholinus (Typhlolinus) varnensis* COIFFAIT 1972; revalidated (Figs 63-64, 68; Map 2)**

*Xantholinus (Acanthophallus) varnensis* COIFFAIT 1972: 290 f.

*Xantholinus (Acanthophallus) gridellii carius* COIFFAIT 1972: 290; **nov.syn.**

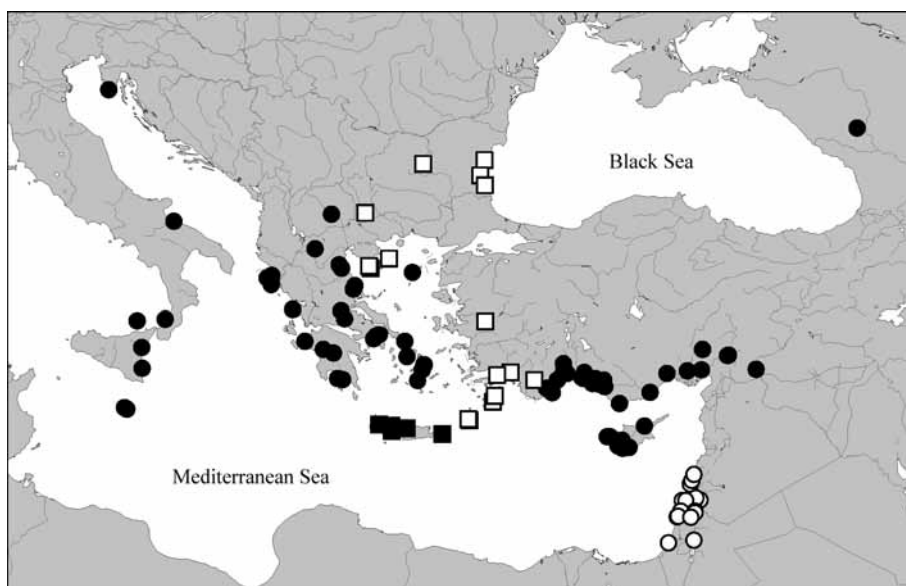
*Xantholinus (Acanthophallus) graecus calcidicus* BORDONI 1973: 75 ff.; **nov.syn.**

**Type material examined:** *X. varnensis* and *X. gridellii carius*: see ASSING (2006a).

**A d d i t i o n a l m a t e r i a l e x a m i n e d :** Greece: Chalkidiki: 3♂♂, 2♀♀: Athos, leg. Schatzmayr (NHMW, cAss); 1♂, 1♀, Kassandra, Pefkohori, near beach, 21.III.1989, leg. Assing (cAss); 1♀, Kassandra, Polichronon, beach debris, 22.III.1989, leg. Assing (cAss); 1♀, Kassandra, Polichronon, under stone, 25.III.1989, leg. Assing (cAss), 1♀, Kassandra, Polichronon, damp meadow, 26.III.1989, leg. Assing (cAss). K a r p a t h o s: 1♂, Aperi, 300 m, 28.IV.1994, leg. Frisch (cAss); 1♂, Pigadia, 10 m, 22.IV.1994, leg. Frisch (cAss); 1♂, Pigadia, 50 m, 21.IV.1994, leg. Frisch (cAss). R h o d o s: 1♂, Kolimbia, V.2000, leg. Bellmann (cAss); 2♂♂, Lindos, Saidouras river, 18.IV.1994, leg. Frisch (cAss). Bulgaria: 1♂, 1♀, Tryavna ["Trevna"], V-

VI.1912, leg. Hilf (NHMW, cAss); 1 ♀, Melnik, 29.IV.1985, leg. Wrase (cSch); 3 ♀♀, Pomorie env., V.1985, leg. Wrase (cSch). Turkey: M a n i s a : 1 ♂, 1 ex., Turgutlu, Çikrikçi, pitfall, 29.VI.2006, leg. Anlaş (cAnl, cAss). M u ğ l a : 2 ♂♂, 2 exs., SE Köyceğiz, 36°57'N, 28°44'E, 10 m, flood plain forest, 28.III.2002, leg. Assing (cAss, cWun). L o c a l i t y n o t s p e c i f i e d : 1 ♂, "Lyciae Taurus", IX.1903, leg. Hauser (NHMW).

**C o m m e n t :** The original description of *X. varnensis* is based on several type specimens from eastern Bulgaria (environs of Varna and Burgas), that of *X. gridellii carius* on a male holotype southwestern Turkey (Marmaris). The type material was studied previously and attributed to *X. graecus* KRAATZ 1858 (ASSING 2006a). *Xantholinus graecus calcidicus* was described from a male holotype from Athos (Greece: Chalkidiki) and four male paratypes from Rhodos. This type material was not examined, but the above males from Athos and Kassandra were collected at or near the type locality of *X. g. calcidicus*. Also, the male from Kassandra was identified by Bordoni as *calcidicus*, and the males from Chalkidiki are conspecific with the above material from Rhodos. Like *X. varnensis* and *X. gridellii carius*, *X. graecus calcidicus* was recently referred to *X. graecus* (ASSING 2007a).



**Map 2:** Revised distributions of *Xantholinus graecus* KRAATZ (filled circles), *X. gridellii* COIFFAIT (open circles), *X. varnensis* COIFFAIT (open squares), and *X. minos* nov.sp. (filled squares).

Originally described as a subspecies of *X. graecus*, *X. calcidicus* was regarded as a distinct species by BORDONI (2007a), who states that *X. calcidicus* has a larger aedeagus with a larger internal sac and with more distinct distal spines, and that the distribution of this species partly overlaps with that of *X. graecus*. According to BORDONI (1982a), *X. calcidicus* is widespread from the west coast of central Italy to northwestern and western Turkey, Rhodos, and Crete (including Albania and central Greece). The maps provided by him for both *X. graecus* and *X. calcidicus*, which were considered subspecies at that time, suggest a considerable - zoogeographically implausible - overlap of the distribu-

tions of both taxa, so that *X. calcidicus* has been treated as a taxon of doubtful status, e. g., by CICERONI & ZANETTI (1995).

A systematic revision of the male primary sexual characters of material previously identified as *Xantholinus graecus* sensu lato from various localities in the eastern Mediterranean confirmed that three previously confounded species are present. One of them, *X. graecus*, is widespread from Italy and Malta to the Middle East and the Caucasus region. Another species is endemic to Crete and described below. The third species is recorded from eastern Bulgaria, northeastern Greece, the Greek islands Karpathos and Rhodos, and western Turkey, a distribution somewhat resembling that of *Medon lydicus* BORDONI 1980 (see distribution map in ASSING 2004b). Based on the revised material, the distributions of the two species are strictly para- or allopatric. Since the names *X. varnensis*, *X. carius* (described in the same work as *X. varnensis*), and *X. calcidicus* all refer to the same species, *X. varnensis* is designated as the senior synonym, of which *X. carius* and *X. calcidicus* are junior synonyms. In view of the revised distribution of *X. varnensis* (Map 2), the records from central Italy, Albania, Crete, and central Greece (as *X. calcidicus*) by BORDONI (1982) are most probably based on misidentifications.

A reliable differentiation between *X. graecus* and *X. varnensis* is possible only based on the shape of the male sternite VIII (*X. varnensis*: slightly longer than wide; *X. graecus*: wider than long) and the morphology of the aedeagus (Figs 63-64, 68). In *X. varnensis*, it is larger (1.0-1.2 mm long; *X. graecus*: 0.7-0.9 mm; rarely - in material from Naxos and Macedonia - up to 1.0 mm), contains a doubled spine (approximately in the middle; best seen in ventral view) in addition to numerous other spines of various shapes (*X. graecus*: spine in the middle of aedeagus not doubled and with darker and somewhat broader base, in addition to numerous other spines of various shapes), and has additional internal structures of somewhat different shape. For illustrations of the aedeagus of *X. graecus* see Figs 60-62, 67. The shape of the posterior margin of the male tergite VIII is remarkably variable in both species and consequently of little use for diagnostic purposes.

### ***Xantholinus (Typhlolinus) graecus* KRAATZ 1858 (Figs 60-62, 67; Map 2)**

*Xantholinus graecus* KRAATZ 1858: 64 f.

**Type material examined:** Lectotype ♂, present designation: "Graecia / graecus mihi / coll. Kraatz / Syntypus / coll. DEI Müncheberg / Lectotypus ♂ *Xantholinus graecus* Kraatz, desig. V. Assing 2008 / *Xantholinus graecus* Kraatz, det. V. Assing 2008" (DEI). Paralectotype ♀: "Attica / coll. Kraatz / Syntypus / coll. DEI Müncheberg" (DEI).

**Additional material examined:** Italy: 1♂, Calabria, Vibo Valentia, 5 km SE Nicotera, 120 m, 27.V.2007, leg. Apfel (cAss); 1♀, Puglia, "Süd-Paicaese" (NHMW); 2♀ ♀, Puglia, Barletta (NHMW); 1♂, Sicilia, Solarino, 170 m, 5.V.1990, leg. Sabella (cZan); 1♂, 1♀, Sicilia, Passo Pomo, 16.VI.1993, leg. Adorno (cZan); 1♂, Sicilia, Messina (cAss); 1♂, Sicilia, Lipari islands, V.1972, leg. Osella (cZan). Malta: 1♂, Ta Qali, 14.V.1994, leg. Scicluna (cAss); 1♂, Zejtun, 7.V.1989, leg. Mifsud (cAss). Croatia: 1♂, Pula, leg. Lang (cAss). Macedonia: 5♂ ♂, Vardar plain, leg. Schatzmayr (NHMW, cAss). Greece [see also ASSING (2007a)]: 1♂, N-Corfu, Arkadades valley, deep leaf litter, 27.IX.1994, leg. Wunderle (cWun); 1♂, NE-Corfu, Archaravi, 20.-25.X.1991, leg. Katschak (cWun); 3♂ ♂, 5♀ ♀, Corfu, leg. Paganetti, Hetschko, Reitter (NHMW); 1♂, Corfu, Potamos, leg. Woerz (cAss); 2♀ ♀, Zakynthos, Kalamaki, 1909, leg. Hilf (NHMW); 2♂ ♂, 2♀ ♀, Thessalia, Volo (NHMW); 2♀ ♀, Thessalia, Pelion (NHMW); 1♀, Thessalia, Olympos (NHMW); 4♂ ♂, 2♀ ♀, Athina, leg. Woerz (NHMW, cAss); 1♂, 1♀, Attica, Pendelikon (NHMW, cAss); 1♂, Attica, Athina, Phaleron Bay, 5♀ ♀, Attica, locality not specified (NHMW); 1♂, 2♀ ♀, Parnassos, leg. Eppelsheim (NHMW); 1♂, Pelopónnisos, Pírgos, Kastro, 5-10 m, 28.IX.-3.X.2002, leg. Wolf (cAss); 1♀, Pelopónnisos, Pírgos, 17 km E Olympia, 21.IX.2002, leg. Wolf (cSch); 1♀, Pelopónnisos, 15 km W Tripolis (NHMW); 1♂, Pelopónnisos,

Yithion [=Githion] (NHMW); 1♀, Pelopónnisos, Koúmani, leg. Brenske (NHMW); 1♂, 2♀♀, Syros island, leg. Schatzmayr (NHMW, cAss); 1♂, Naxos island (cAss); 3♂♂, 2♀♀, locality not specified (NHMW). Turkey [see also ASSING (2006a, 2007a, 2007b)]: 20 exs., Antalya, Ihsaniye, 36°55'N, 30°50'E, 200 m, flooded pasture, 7.&13.V.2001, leg. Barclay & Mann (BMNH, cAss); 2♂♂, Adana (NHMW). Cyprus [see also ASSING & WUNDERLE (2001)]: 1♂, Troodos, 34°55'N, 32°52'E, 1550 m, 9.IV.2008, leg. Lompe (cAss); 1♀, locality not specified (NHMW). Russia: see ASSING (2007a).

**Comment:** The original description of *X. graecus* is based on an unspecified number of syntypes from "Attica, Nauplia...; Creta...; Athen". Two syntypes, a male and a female, were found in the Kraatz collection; the male is designated as the lectotype.

**Distribution:** For an illustration of the revised distribution of this species see Map 2. Interestingly, the distribution appears to be disjunct, the western part extending from southern Italy and Malta to Greece and separated from the eastern part by a corridor occupied by *X. varnensis*. The records previously reported from Chalkidiki, Karpathos, Rhodos, Crete, and western Anatolia (Muğla) (ASSING 2007a) are based on misidentifications and refer to *X. varnensis* and *X. minos*, respectively. The same applies to previous records from Lebanon and Israel; all the examined specimens from these countries identified as *X. graecus* have proved to be misidentified *X. gridellii*, occasionally also other species. The aedeagus is illustrated in Figs 60-62, 67. Based on the revised distributions, the species of the *X. graecus* group are strictly allo- or parapatric (Map 2). *Xantholinus graecus* is reported from Malta for the first time.

### ***Xantholinus (Typhlolinus) minos* nov.sp.** (Figs 65-66, 69-73; Map 2)

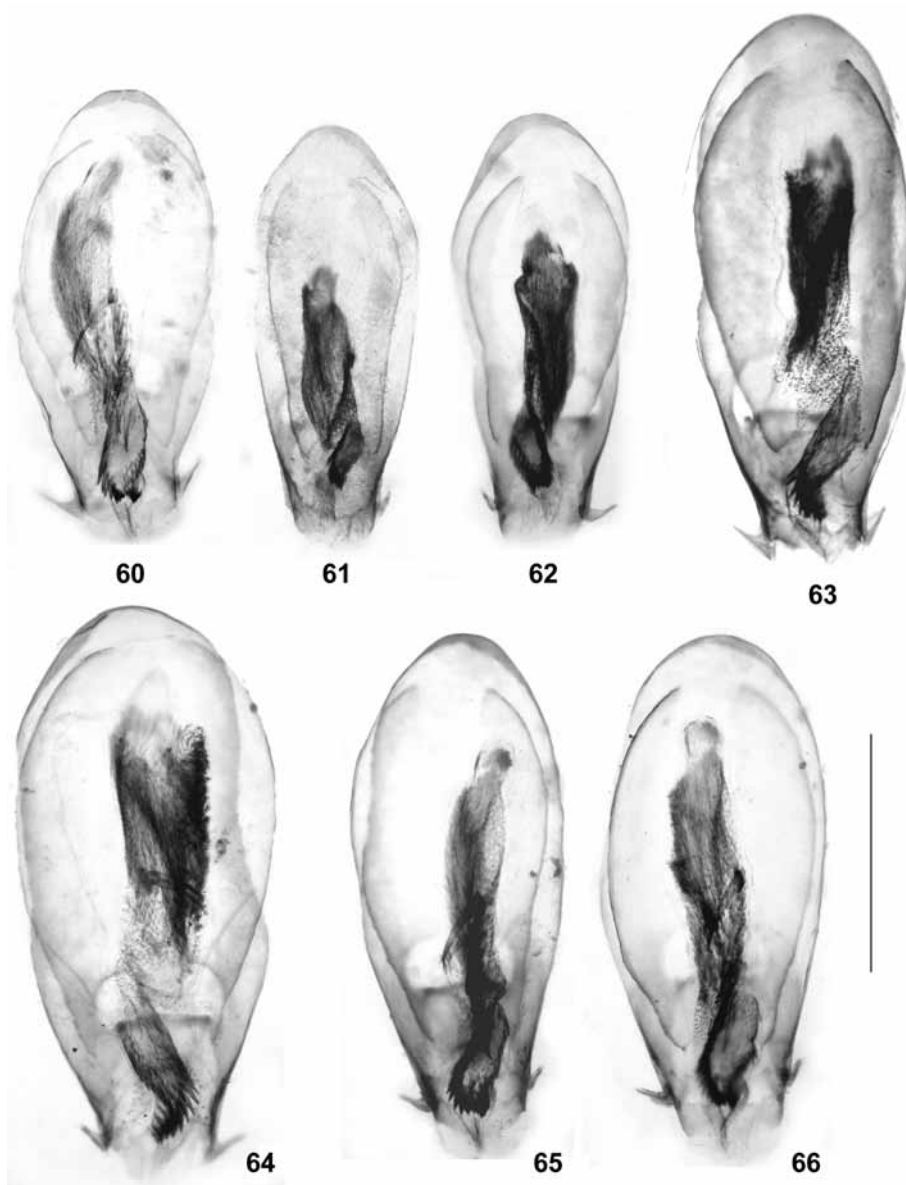
**Type material:** Holotype ♂: "Kreta: Umg. Kalives, 70-340 m, 12.-26.V.2008, leg. R. & I. Schimmel / Holotypus ♂ *Xantholinus minos* sp. n. det. V. Assing 2008" (cAss). Paratypes: 2♀♀: same data as holotype (cAss); 1♂, 2♀♀: "GR: Crete [10], Rethymn.: beach near Dramia, 35°21'03N, 24°20'26E, 22.X.2006, M. Schülke" (cSch, cAss); 1♀: "GR: Crete [2], Rethymn.: ca. 1.5 km S Kanevos, Kotsifos cleft, 440 m, 35°13'36N, 24°24'00E, 20.X.2006, M. Schülke" (cSch); 1♂, 1♀: "Kreta/Chania, Kavallos, 3.6.1981, leg. Mühle" (cAss); 1♂: "Kreta: Fassatal, W Chliaro, 23°53', 35°24' / 18.-29.5.77, Malicky [overleaf]" (cAss); 2♀♀: "28.3.73, Ost-Kreta, Zakros, Tal d. Toten, DrFülscher Meybohm" (cAss); 1♂: "Kreta: Plakias, 23.3.1988, leg. Winkelmann-Klöck" (cSch); 1♀: "Kreta: Südküste, Plakias, 2.-16.4.1993, leg. Winkelmann-Klöck" (cSch); 2♂♂: "GR - W-Kreta, IV.1997, Rethimnon, Dramia, Mouselas-Ufer, leg. B. Feldmann" (cFel, cAss); 1♂: "Creta, Anogya, 2/13.5.95" (cZan); 1♀: "Candia [?], leg. Holtz" (NHMW).

**Description:** External morphology as in *X. graecus* and *X. varnensis*; distinguished only by the male sexual characters.

♂: posterior margin of tergite VIII usually weakly undulate and weakly to distinctly concave, sometimes almost truncate (Fig. 71); sternite VIII (Fig. 72) approximately 1.1 times as wide (at anterior margin) as long (along the middle); aedeagus 0.9-1.0 mm long, with 1 rather stout and basally moderately dilated sub-distal spine (best seen in ventral aspect), a series of approximately 8 rather long, pale brownish to yellowish sub-proximal spines, and a cluster of short blackish proximal spines (Figs 65-66, 69-70, 73).

**Etymology:** The specific epithet alludes to Minos, son of Zeus, the legendary ruler of Crete.

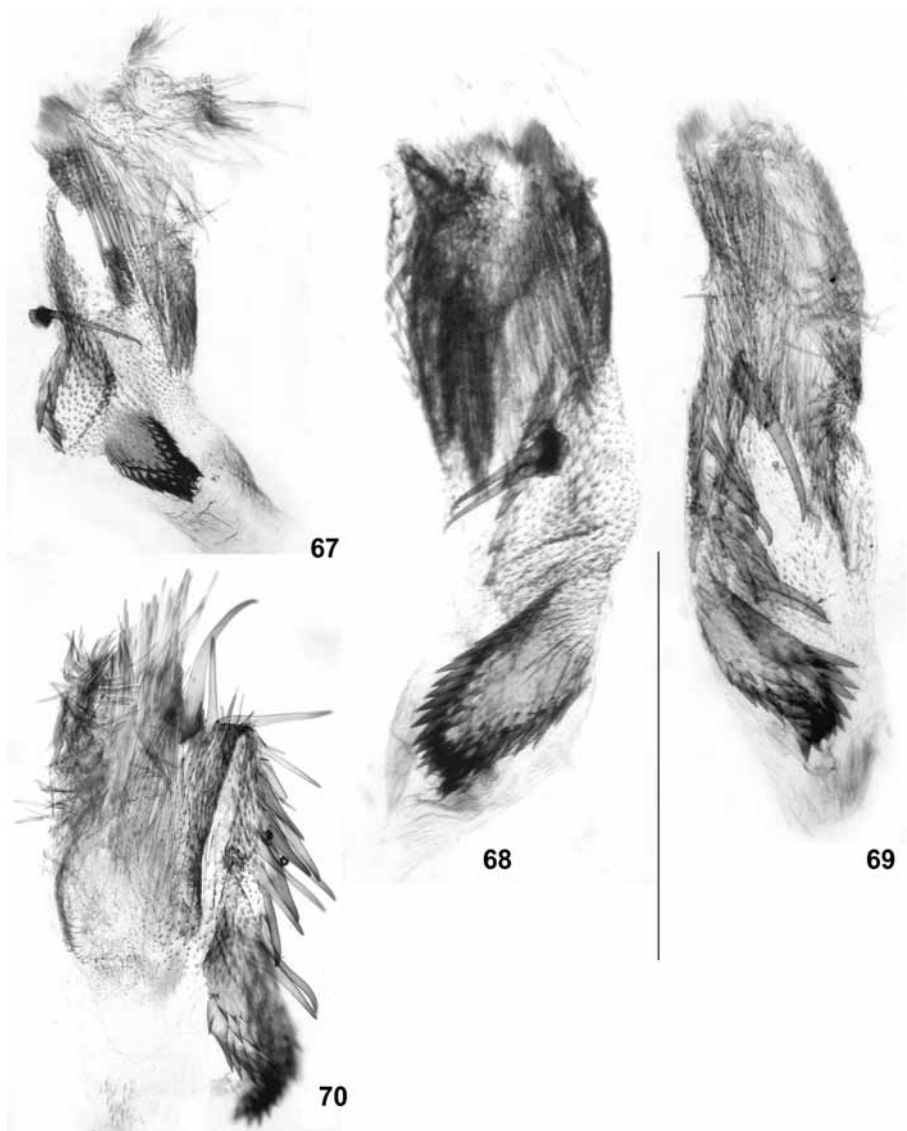
**Comparative notes:** From the two similar and, based on the synapomorphically derived morphology of the aedeagus and of the male tergite and sternite VIII, closely related *X. graecus* and *X. varnensis*, the new species is separated as follows:



**Figs 60-66:** *Xantholinus graecus* KRAATZ (60-62), *X. varnensis* COIFFAIT (63-64), and *X. minos* nov.sp. (65-66): aedeagus in dorsal or in ventral view of lectotype (60), paratypes (65-66), and males from Mersin (61), Pelopónnisos (62), Muğla (63), and Karpathos (64). Scale bar: 0.5 mm.

from *X. graecus* by the slightly less transverse male sternite VIII (in *X. graecus* approximately 1.15 times as wide as long), by the - on average - less distinctly concave posterior

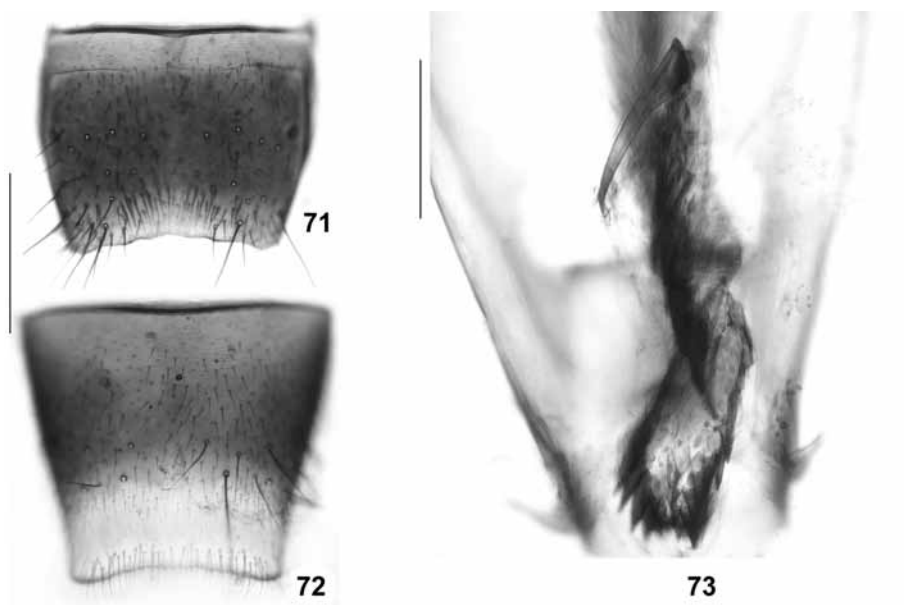
margin of the male tergite VIII, by the larger aedeagus (no overlap), and by the internal structures of the aedeagus (stouter and less broad-based sub-distal spine, series of distinctly longer sub-proximal spines);



**Figs 67-70:** *Xantholinus graecus* KRAATZ (67), *X. varnensis* COIFFAIT (68), and *X. minos* nov.sp. (69-70): internal structures of aedeagus in squeeze preparation. Scale bar: 0.5 mm.

from *X. varnensis* by the transverse male sternite VIII (in *X. varnensis* oblong), by the - on average - less distinctly concave posterior margin of the male tergite VIII, the smaller aedeagus (no overlap), and by the internal structures of the aedeagus (presence of only one sub-distal spine; much longer and more numerous sub-proximal spines, cluster of proximal spines of different shape).

From the sympatric *X. creticus* of the subgenus *Xantholinus*, *X. minos* is distinguished by larger body size, darker average coloration, the modified male tergite and sternite VIII, and by the completely different internal structures of the aedeagus. For illustrations of the sexual characters of *X. creticus* see ASSING (2006b).



**Figs 71-73:** *Xantholinus minos* nov.sp.: male tergite VIII (71), male sternite VIII (72), and proximal part of aedeagus in dorsal view (73). Scale bars: 71-72: 0.5 mm; 73: 0.2 mm.

**Distribution and bionomics:** *Xantholinus minos* is evidently endemic to Crete, where it appears to be widespread and not uncommon (Map 2). The type material was collected in leaf litter, on a river bank, and on a beach at altitudes of 0-440 m in March-June, and October.

**Zoogeographic conclusions:** The distribution of this species, as well as that of the other species of the *X. graecus* group underline yet again that

- the fauna of Crete is characterised by a high proportion of endemics;
- the fauna of Crete is zoogeographically distinct from that of mainland Greece (including the Pelopónnisos), southwestern Anatolia, and the neighbouring Aegean islands (Karpathos, Rhodos);

- the fauna of Karpathos and Rhodos is more related to that of southwestern Anatolia than to that of mainland Greece and Crete;
- the fauna of Crete is probably more related to that of the Pelopónnisos than to that of the Aegean islands.

Additional evidence supporting these conclusions is provided by the distribution patterns of numerous other staphylinid taxa, e. g. *Boreaphilus* SAHLBERG, *Medon* STEPHENS, *Leptobium* CASEY, *Pronomaea* ERICHSON, *Alevonota* THOMSON, *Geostiba* THOMSON, and *Tectusa* BERNHAUER.

### ***Xantholinus (Typhlolinus) gridellii* COIFFAIT (Map 2)**

*Xantholinus (Acanthophallus) gridellii* COIFFAIT 1956: 58.

Type material examined: see ASSING (2007a).

Additional material examined: Israel: 12♂♂, 10♀♀, Central District, Nitsanim, dunes between Ashdod and Ashkelon, 29.III.2008, leg. Wrase (cSch, cAss); 1♂, Haifa District, S Haifa, salines at Atlit, 30.III.2008, leg Wrase (cAss); 1♀, North District, Upper Galilee, northern shore of Sea of Galilee, tamarisk flood plain forest between Kfar Nakhum (Capernaum) and mouth of Jordan river, -200 m, 31.III.-1.IV.2008, leg. Wrase (cSch). Lebanon: 1♂, Beyrouth, 1878, leg. Appl (cAss).

Distribution: The revised distribution of *X. gridellii* is confined to Lebanon and Israel in southern Middle East (Map 2). Previous records from Algeria (BORDONI 1976) and Cyprus (COIFFAIT 1972) are evidently erroneous and refer to similar congeners. The same is probably also true of the female-based record from Gaziantep (ASSING 2007a), the only record from Turkey, which most likely refers to *X. graecus*. For additional records see ASSING (2007a).

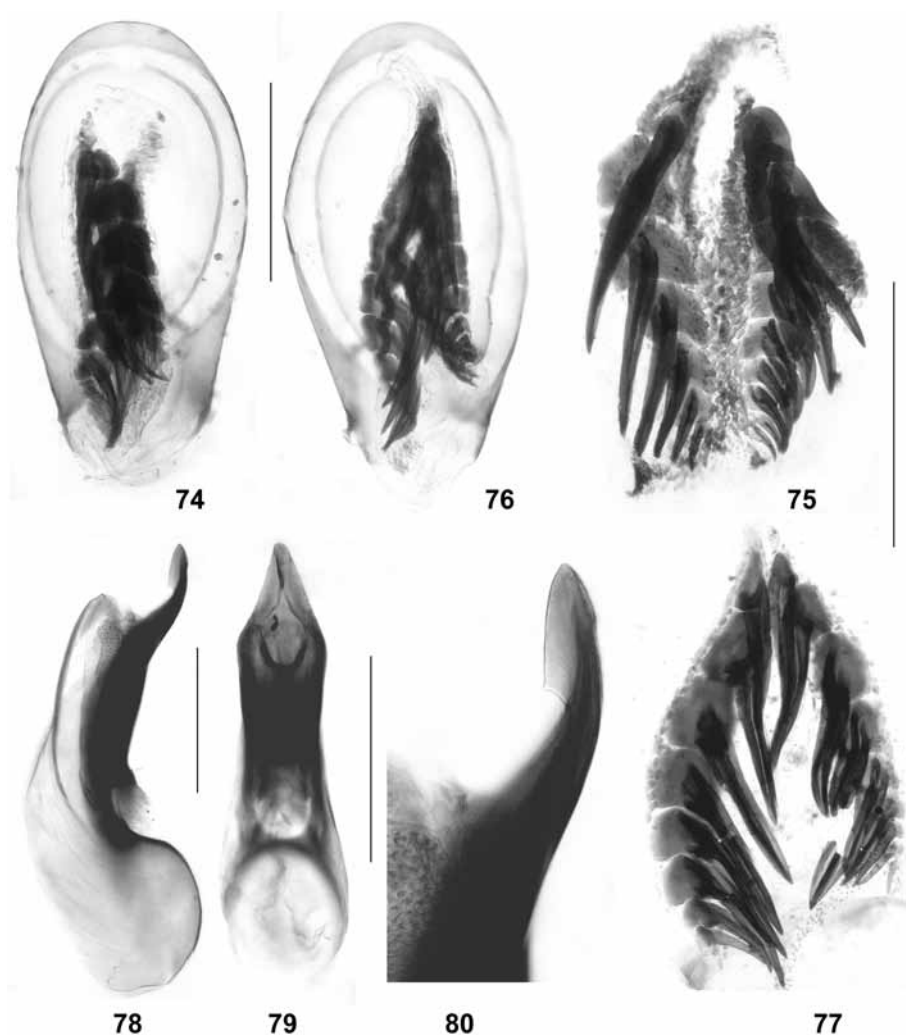
### ***Xantholinus (Idiolinus) ciliciae* BORDONI 1971 (Figs 74-77)**

*Xantholinus (Echinophallus) ciliciae* BORDONI 1971: 680 ff.

*Xantholinus (Calolinus) cypriacus* BORDONI 2007b: 64; **nov.syn.**

Comment: *Xantholinus ciliciae* was originally described in the subgenus *Echinophallus* COIFFAIT 1956 (now a synonym of *Idiolinus* CASEY 1906), based on a male holotype and seven male paratypes from "Cilicia, Adana" (BORDONI 1971). Recently, the same species was described again as *X. cypriacus* in the subgenus *Calolinus* COIFFAIT 1956, from a single male collected in "Cyprus: Kyrenia" (BORDONI 2007b). The species is rather common both in southern Turkey and Cyprus (ASSING 2004a, 2007a; ASSING & WUNDERLE 2001); for a distribution map see ASSING (2007a). Based on the illustration of the aedeagus and other external characters (coloration, short wings) given in the original description of *X. cypriacus*, there is no doubt that the holotype is conspecific with the type material of *X. ciliciae*. A study of hundreds of specimens, including the distinctive internal structures of the aedeagus (Figs 74-77), yielded no evidence whatsoever that the material from Cyprus should be specifically distinct from the populations in southern Turkey, so that *X. cypriacus* is placed in the synonymy of the senior name *X. ciliciae*.

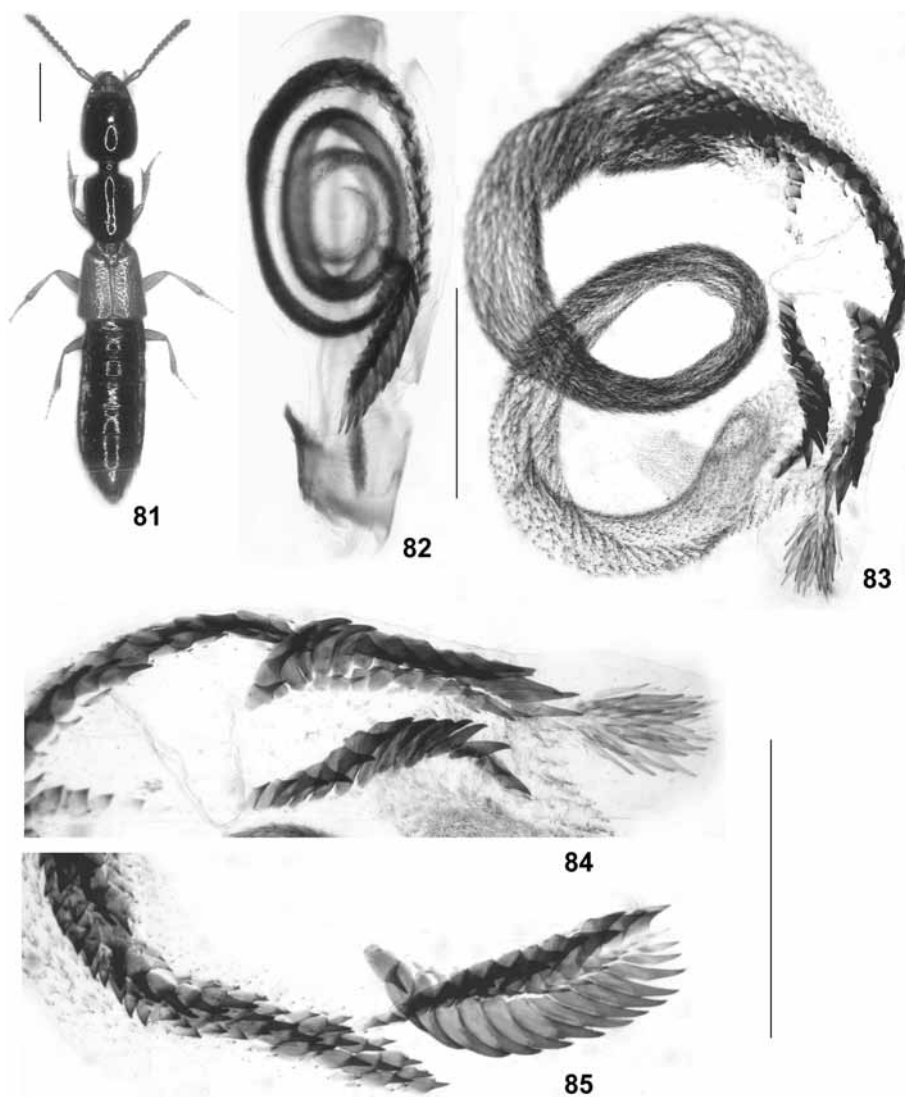




**Figs 74-80:** *Xantholinus ciliciae* BORDONI (74-75: males from Turkey; 76-77: males from Cyprus) and *Astenus uniformis* (JACQUELIN DU VAL), neotype (78-80): aedeagus in dorsal view (74, 76); internal structures of aedeagus in squeeze preparation (75, 77); aedeagus in lateral and in ventral view (78-79); apex of aedeagus in lateral view (80). Scale bars: 74-77: 0.5 mm; 78-79: 0.2 mm; 80: 0.1 mm.

***Xantholinus (Helicophallus) kurdistanicus* nov.sp.** (Figs 81-85)

**Type material:** Holotype ♂: "Iraq - SE Rawandoz, 36°30'N, 44°36'E, 1200-1400 m, pitfall, XI.2007-III.2008, leg. C. Reuter / Holotypus ♂ *Xantholinus kurdistanicus* sp.n. det. V. Assing 2008" (cAss). **Paratypes:** 1 ♂, 3 ♀: same data as holotype (cFel, cAss); 2 ♂: "N-Irak, near Rawandoz, 14.-22.XI.2007, N36°30'02, E44°36'16, 1400 m, leg. C. Reuter" (cFel).



**Figs 81-85:** *Xantholinus kurdistanicus* nov.sp.: habitus (81); aedeagus (82); internal structures of aedeagus in squeeze preparation (83); proximal internal structures of aedeagus in squeeze preparation (84-85). Scale bars: 81: 1.0 mm; 82-85: 0.5 mm.

**Description:** 7.5-9.5 mm. Habitus as in Fig. 81. Coloration: head blackish; pronotum blackish-brown; elytra bright reddish; abdomen blackish-brown, with the apex (posterior margin of segment VII, all of segments VIII-X) reddish; legs reddish; antennae with antennomeres I-III reddish and IV-XI reddish-brown.

Head approximately 1.2 times as long as wide; punctation sparse and rather fine; median dorsal surface without microsculpture; posterior dorsal and lateral surfaces usually at least with shallow traces of microsculpture.

Pronotum approximately 1.45-1.50 times as long as wide and 0.85-0.90 times as wide as head; dorsal rows composed of approximately 10 punctures. Elytra at posterior margin approximately 1.3 times as wide and at suture 0.7 times as long as pronotum.

♂: aedeagus with subproximal series composed of approximately 25 short and apically acute spines and with two proximal series of spines, one of them composed of 13-15 moderately long, slender, and pale coloured spines and the other of 10-15 short, apically darker spines (Figs 82-85).

**E t y m o l o g y :** The name is derived from the region where the species was discovered.

**C o m p a r a t i v e   n o t e s :** Among the Eastern Mediterranean consubgenera, the internal structures of the aedeagus most resemble those of *X. brevispinosus* ASSING 2007 from Antalya, southern Anatolia. From this species, *X. kurdistanicus* is distinguished by slightly smaller size, shorter antennae, and particularly by the internal structures of the aedeagus: in the new species the sub-proximal spines are distinctly smaller and shorter. For illustrations of the aedeagus of *X. brevispinosus* and of other Eastern Mediterranean species see ASSING (2007a).

**D i s t r i b u t i o n   a n d   b i o n o m i c s :** The type locality is situated in the area to the southeast of Rawandoz, northeastern Iraq. The specimens were collected partly by hand and partly with pitfall traps on a slope along a temporary stream with oak trees and grassland at an altitude of 1200-1400 m.

### 3.2.6. Doubtful names excluded from Xantholinini

#### ***Othius brevipennis* (KRAATZ 1857), nomen protectum**

*Xantholinus rufus* GRIMMER 1841: 33; **nov.syn., nomen oblitum**

*Xantholinus occultans* GISTEL 1857: 25; **nov.syn.**

**T y p e   m a t e r i a l   e x a m i n e d :** Neotype ♂, present designation: "Styria boreal., Umgeb. Turnau, VII. 31, Ing. Prock / *Othius brevipennis* / *Othius brevipennis* ♂ Kraatz det. V. Assing 1998 / Neotypus ♂ *Xantholinus rufus* Grimmer desig. V. Assing 2008 / Neotypus ♂ *Xantholinus occultans* Gistel desig. V. Assing 2008" (NHMW).

**C o m m e n t :** The extremely short and vague original descriptions of the nomina dubia *Xantholinus rufus* and *X. occultans*, both of them based on an unspecified number or syntypes from Steiermark and Styria, respectively, evidently refer to the same species. The former is characterised by "2 Linien Länge, schmale Breite; Farbe braunroth und punctirt" (GRIMMER 1841), the latter as "totus rufus" and "2 lin." long (GISTEL 1857). The few descriptive details available, the ecological information ("im Gebirge unter Steinen und altem Holz" and "sub plantis lapidibusque", respectively), as well as the distribution best fit *Othius brevipennis* KRAATZ 1857, with which both *X. rufus* and *X. occultans* are synonymised. Since the type material of both nomina dubia can be regarded as lost (see introduction), a male of *O. brevipennis* from Steiermark is designated as the neotype of both *X. rufus* and *X. occultans* and deposited in the collections of the NHMW.

Although *O. brevipennis* is the junior name in relation to *X. rufus*, it is given precedence

according to Article 23.9 of the current International Code of Zoological Nomenclature (ICZN 1999). Both conditions for the application of Article 23.9 are met. The name *Xantholinus rufus* has not been used as a valid name after 1899 (HERMAN 2001), whereas *Othius brevipennis* has been used as the valid name of a species that is rather common in the eastern Alps and adjacent regions in more than 25 works by more than 10 authors in the past 50 years. In addition to the 15 references - by 13 authors - provided by HERMAN (2001), *O. brevipennis* has been cited as the valid name by ASSING (2003a, 2003b, 2005a, 2008b), ASSING & SCHÜLKE (2001, 2007), HERMAN (2001), HOLZER (1998), SCHATZ (1989), SMETANA (1960, 1961, 2004), and ŠUSTEK (1995). Additional references may be provided without difficulty. In conclusion, based on Article 23.9 of the Code, the following synonymy is established: *Othius brevipennis* KRAATZ 1857 (nomen protectum) = *Xantholinus rufus* GRIMMER 1841 (nomen oblitum), nov.syn.

#### 4. Acknowledgements

I am indebted to all the colleagues listed in the material section for the loan of material under their care. In particular, I would like to thank Michael Schülke (Berlin), Benedikt Feldmann (Münster), and Vitaly Kastcheev (Almaty) for the generous gift of several holotypes of species described in this paper. Christopher Majka (Halifax) provided helpful suggestions regarding stylistic aspects and Benedikt Feldmann proof-read the manuscript.

#### 5. Zusammenfassung

Typen und weiteres Material paläarktischer Arten Paederinae und Xantholinini wurden untersucht. Sieben Arten werden beschrieben: *Pseudomedon afghanicus* nov.sp. (Afghanistan), *Pseudomedon kazakhstanicus* nov.sp. (Kasachstan), *Lithocharis schuelkei* nov.sp. (Jemen), *Lobrathium reuteri* nov.sp. (Irak), *Lathrobium vitalyi* nov.sp. (Kasachstan), *Xantholinus (Typhlolinus) minos* nov.sp. (Griechenland: Kreta), *Xantholinus (Helicophallus) kurdistanicus* nov.sp. (Irak). Die neuen Arten und eine Reihe weiterer Arten werden abgebildet. *Platydomene distinctiventris* (KOCH 1939), bisher Subspezies von *P. sodale* (KRAATZ), wird als distinkte Art betrachtet; ihre Verbreitung ist offenbar auf die Karpathen und deren Ausläufer beschränkt. Die folgenden Namen werden synonymisiert: *Astenus* DEJEAN 1833 = *Astenognathus* REITTER 1909, nov.syn.; *Lathrobium* GRAVENHORST 1802 = *Centrocnemis* JOSEPH 1868, nov.syn., = *Centrocnemiella* STRAND 1934, nov.syn.; *Xantholinus* DEJEAN 1821 = *Meneidophallus* BORDONI 1999, nov.syn.; *Astenus gracilis* (PAYKULL 1789) = *A. rutilipennis* REITTER 1909, nov.syn.; *A. procerus* (GRAVENHORST 1806) = *A. noheli* COIFFAIT 1969, nov.syn.; *A. uniformis* (JACQUELIN DU VAL 1853) = *A. maghrebinus* COIFFAIT 1960, nov.syn.; *A. pallidulus* (WOLLASTON 1864) = *A. parviceps* RAGUSA 1891, nov.syn., = *A. antoinei* COIFFAIT 1980, nov.syn., = *A. murreus* BORDONI 1994, nov.syn.; *Platystethus arenarius* (GEOFFROY 1785) = *Paederus verbasci* SCHRANK 1798, nov.syn.; *Rugilus orbiculatus* (PAYKULL 1796) = *R. exiguus* HEER 1839, nov.syn.; *R. rufipes* (GERMAR 1836) = *Stilicis nematideus* GISTEL 1857, nov.syn.; *Rugilus subtilis* (ERICHSON 1840) = *R. salicetorum* GISTEL 1857, nov.syn.; *Pseudomedon huetheri* (HUBENTHAL 1927) = *Medon huetheri helveticus* KOCH 1938, nov.syn.; *Pseudomedon obscurellus* (ERICHSON 1840) = *Scymbalium minimum* EPPELSHEIM 1888, nov.syn., = *Medon apfelbecki* BERNHAUER 1899, nov.syn.; *Lobrathium multipunctum* (GRAVENHORST 1802) = *Lathrobium multistriatum* MOTSCHULSKY 1858, nov.syn., = *Lathrobium differens* GEMMINGER & HAROLD 1868, nov.syn.; *Lathrobium longulum* GRAVENHORST 1802 = *L. scybalarium* GISTEL 1857, nov.syn., = *L. longulum luzari* KOCH 1937, nov.syn.; *L. laevipenne* HEER 1839 = *L. elytrale* GISTEL 1857, nov.syn.; *L. pallidum* NORDMANN 1837 = *L. krniense* JOSEPH 1868, nov.syn.; *L. brunnipes* (FABRICIUS 1793) = *L. fuscum*

GRAVENHORST 1806, **nov.syn.**; *Ochtheophilum fracticorne* (PAYKULL 1800) = *Cryptobium pallidum* GISTEL 1857, **nov.syn.**; *Zeteotomus brevicornis* (ERICHSON 1839) = *Metoponcus brevicornis cephalenicus* BORDONI 1983, **nov.syn.**; *Gauropterus fulgidus* (FABRICIUS 1787) = *G. fulgidus pseudosanguinipes* COIFFAIT 1964, **nov.syn.**; *Xantholinus longiventris* HEER 1839 = *X. humidicola* GISTEL 1857, **nov.syn.**, = *X. gastraeus* GISTEL 1857, **nov.syn.**; *X. varnensis* COIFFAIT 1972 = *X. gridellii carius* COIFFAIT 1972, **nov.syn.**, = *X. graecus calcidicus* BORDONI 1973, **nov.syn.**; *X. ciliciae* BORDONI 1971 = *X. cypriacus* BORDONI 2007, **nov.syn.**; *Othius brevipennis* (KRAATZ 1857), **nomen protectum** = *Xantholinus rufus* GRIMMER 1841, **nov.syn.**, **nomen oblitum**, = *X. occultans* GISTEL 1857, **nov.syn.**; *Lordithon lunulatus* (LINNAEUS 1760) = *Staphylinus austriacus* SCHRANK 1781, **nov.syn.**; *Cordalia obscura* (GRAVENHORST 1802) = *Paederus clavicornis* LENTZ 1856, **nov.syn.** *Gyrophypnus libanoticus* BORDONI 1984 wird mit *G. fracticornis* (MÜLLER 1776) resynonymisiert. 5 Namen werden revalidiert: *Tetartopeus ciceronii* ZANETTI 1998, *Xantholinus varnensis* COIFFAIT 1972, *Gyrophypnus liber* ASSING 2003, *G. vomer* ASSING 2003 und *G. schuelkei* ASSING 2003. Für *Sunius uniformis* JACQUELIN DU VAL 1853, *Lathrobium fuscum* GRAVENHORST 1806, *Xantholinus rufus* GRIMMER 1841 und *Xantholinus occultans* GISTEL 1857 werden Neotypen designiert. Für folgende Namen werden Lectotypen designiert: *Astenus rutilipennis* REITTER 1909, *Sunius unicolor* MULSANT & REY 1878, *S. subditus* MULSANT & REY 1878, *S. bimaculatus* ERICHSON 1840, *Stilicus geniculatus* ERICHSON 1839, *S. similis* ERICHSON 1839, *S. subtilis* ERICHSON 1840, *Medon huetheri* HUBENTHAL 1927, *Medon huetheri helveticus* KOCH 1938, *Paederus ochraceus* GRAVENHORST 1802, *Lithocharis vilis* KRAATZ 1859, *L. nigriceps* KRAATZ 1859, *Lathrobium sodale distinctiventre* KOCH 1939, *L. spadiceum* ERICHSON 1840, *Xantholinus graecus* KRAATZ 1858. Weitere Nachweise verschiedener Paederinen- und Xantholininen-Arten werden gemeldet, darunter eine Reihe von Erstnachweisen; *Lithocharis subochracea* COIFFAIT 1966 wird erstmals für die Paläarktis nachgewiesen. Die Verbreitungsgebiete von *Pseudomedon dido* (SAULCY 1865) sowie den Arten der *Xantholinus graecus*-Gruppe werden anhand von Karten illustriert.

## 6. References

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